A Clinical Lecture
ON
FRACTURES OF THE LOWER LIMB.

Delivered at University College Hospital on Dec. 2nd, 1895,

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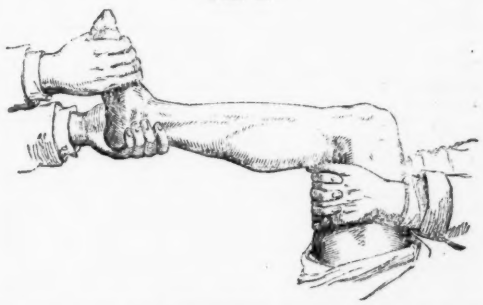
GENTLEMEN,—During the last two months we have had in the wards under my charge the average number of fractures, but it is a little remarkable that we have not had a single case of compound fracture. I will first direct your attention to the case of fracture of both thighs which you have just seen in No. 1 ward. The patient is a man who fell a distance of forty feet down a lift and sustained a fracture of both thighs, but, fortunately for him, they were simple and not compound. The fractures in this case have been treated by the plan of weight-extension, and the result we have attained is very good. In the right thigh, where the fracture occurred lower down than in the left thigh, callus has been thrown out, and it is evident that a good union has taken place, and this at the end of four weeks. At the fracture in the left thigh less callus has been formed, but still union has occurred, though perhaps a weak union. Extra care must, therefore, be taken of the case, and by putting the two fractures up in plaster-of-Paris for another four weeks perfect union may be expected. You will remember that I said in the ward that it would be better to get the patient up and about, and I said this because after a man has been lying in bed for four weeks his strength begins to fail, and he will do better by being up and about in a fixed apparatus than by lying on his back in bed.

Let me here remind you of a case of absolute non-union of a fracture of the femur which was sent up to the wards under my care a short time ago. Although the case had been well treated in the usual manner by perfectly competent surgeons, there was absolutely no union. I had that patient brought into this theatre, and under an anæsthetic I applied extension so as to bring the two parts of the fractured bone thoroughly together, and I also went through the manœuvre of bending the bone at the seat of the fracture. It is possible, though I do not say it was so in this particular case, that the two surfaces of the broken bone had not been brought into close apposition. Some tissue, perhaps, may have been interposed between the two surfaces, and that would be quite enough to account for the non-union of the fracture. To have simply made extension would probably have been of no use, and I therefore did what you have seen me do before, though not in a case of fractured thigh—I bent the bone at the seat of the fracture, the object being to place the limb in the position it was probably in when the fracture occurred, and then to try to bring the ends together so that they should grate one against the other. In this case I think I succeeded in getting the bones into very fair position, and the fracture was then put up in plaster, fixing both the hip and knee-joints. At the end of a fortnight, however, the patient again required our attention, because the plaster had given way at the groin and wanted repairing. I had fresh plaster put on outside the old at the groin and let the man go away till after Christmas, when he is to return, so that I can take the plaster off myself and see how the case has progressed.

We have, then, two cases—one a case of weak union, the other a case of absolute non-union—both treated by fixation and both allowed to be up and about on crutches. So far as the splint will allow there will thus be pressure made on the two ends of the bone at the seat of fracture, and in that way I hope we shall have extra callus thrown out and avoid an operation for ununited fracture. I would remind you how important it is, in fracture of the leg particularly, that the fracture should be set thoroughly and accurately. Of course I know well that there are many difficulties. Immediately after the accident all the muscles of the limb are more or less in a state of spasm, and tend, therefore, to pull the bones into abnormal positions, but that state of spasm passes off in the course of a few hours, and you can generally manage with care and patience to put the limb into a proper position, and unless that is done, and done accurately, the surgeon has not treated the case properly.

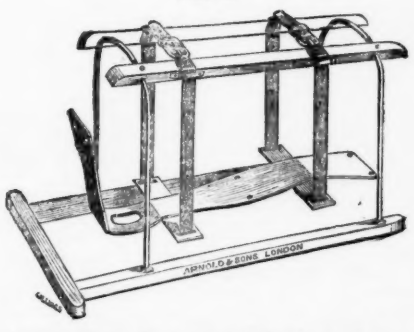
Looking at this specimen from the museum, you can see that there has been a fracture of both the tibia and fibula, and the probability is that they were broken by direct violence, because the fractures are nearly opposite one another, whereas if the accident had occurred from indirect violence the fracture of the fibula would have taken place higher up. I therefore think that we shall be right in saying that this was a case of direct violence, causing, as you can see, very considerable displacement, the lower fragment of the tibia passing behind the upper fragment. Union in this case has been very complete, abundance of callus having been thrown out, but the patient recovered with a shortened and deformed limb. This is just the class of case of which I was thinking when I emphasised the importance of thoroughly setting a fracture. In this case apparently there has been no thorough setting or keeping of the parts in apposition. The first thing to see to in such a case is relaxation of the muscles while extension is applied to the limb, and a good way to attain this object is shown in Fig. 1. The thigh is

FIG. 1.



flexed, and an assistant should pull on the thigh in the manner shown, the lower part of the thigh being firmly clasped and held perpendicularly to the recumbent body; the leg is then flexed to a right angle with the thigh so as to relax the muscles of the calf, and the surgeon, grasping the foot, can manipulate for fracture or dislocation. It is in this form of fracture of both bones of the leg that I would recommend you occasionally to flex the limb at the seat of fracture if you cannot get the bones into good position. This may seem a dangerous proceeding, but it is not so hazardous as one might think, though you must nevertheless be very careful to avoid making a simple fracture compound. In the average case, however, you can set the fracture in the way I have described without much trouble, and in compound fractures you can manage it with greater ease, and, moreover, you can insert your finger and feel if the two ends are in

FIG. 2.



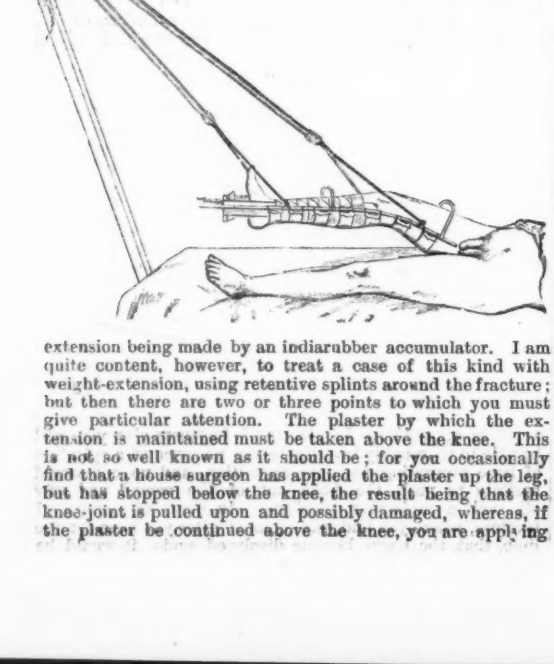
accurate apposition. In compound fractures also you will be able to thoroughly investigate the presence of a spiculum of bone preventing accurate apposition, and no one would hesitate to push the bone out of the wound and saw off such a projecting spiculum. In cases of compound fracture, where you find, the moment after you have set the limb, that the bones become displaced again, it would be

quite within the bounds of good surgery to divide the tendo Achillis subcutaneously, or to drill the two fragments and put in pegs or screws to hold the bones together; and I may say that this method of pegging or screwing has been recommended by an enterprising surgeon not only for compound but also for simple fractures. But I cannot conceive how anyone can believe that it is justifiable to convert a simple into a compound fracture, and of this I am quite certain: that the majority of surgeons for the present will remain content with the usual methods of treatment.

The tendency of the lower fragment to drop back with the foot is best met by the use of a back splint, and I know of none better than what is commonly called Arnold's splint (Fig. 2). If the foot is carefully bandaged to the upright foot-piece, and then extension made until the fracture is properly set, the upper fragment can be fixed to the splint by a broad band of adhesive plaster, and a bandage carried over it and above the knee. The side splints, which are subsequently applied with webbing straps, help to keep the bones in position, and the inner border of the great toe should be in a line with the inner border of the patella. This afternoon I called your attention in the wards to a recent fracture of the tibia, where I was not quite satisfied with the subcutaneous line of the bone; I therefore asked my house surgeon to raise the foot a little, and immediately this was done the fragments dropped into position, and the improvement was obvious. The importance of thus raising the foot in oblique fractures of the tibia is not sufficiently recognised; it is a valuable point to remember, and I learnt it myself from Mr. Jonathan Hutchinson.

Returning to the case of the man with both thighs fractured, let us briefly consider how fractures of the thigh should be treated. The particular method used depends to a great extent on the views of the individual surgeon, and I am not prepared to say that there is any very special advantage in one treatment over another. Provided you will only attend carefully to certain rules, you may perfectly well expect equally good results from different methods. In my own wards, as a general rule, and in accordance with local tradition, Liston's long splint with a perineal band is the method usually adopted, and its results are quite satisfactory. Of course, there is no hard-and-fast rule, and here is a case in point where the method of weight-extension was more convenient. It would be a little awkward to put up a fracture of both thighs with Liston's splints, unless you used an apparatus such as Bryant's, consisting of two long splints and a cross-bar, the

FIG. 3.

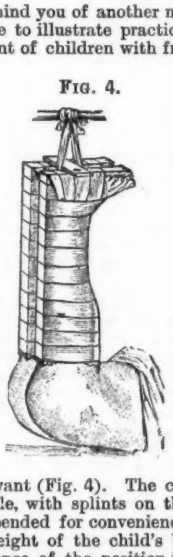


extension being made by an indiarubber accumulator. I am quite content, however, to treat a case of this kind with weight-extension, using retentive splints around the fracture; but then there are two or three points to which you must give particular attention. The plaster by which the extension is maintained must be taken above the knee. This is not so well known as it should be; for you occasionally find that a house surgeon has applied the plaster up the leg, but has stopped below the knee, the result being that the knee-joint is pulled upon and possibly damaged, whereas, if the plaster be continued above the knee, you are applying weight-extension to the fractured bone, the necessary counter-extension being obtained by the weight of the patient's body. Sometimes it is found necessary to raise the foot of the bed, but usually the weight of the patient's body is sufficient, and it is seldom that you find yourself reduced to the necessity of using a perineal band attached to the head of the bed, unless in cases of fracture in children.

Hodgen's splint (Fig. 3) is much in use at Guy's Hospital. There is a strong bar from the foot of the bed, and from that bar, which projects away from the bed, is arranged a pulley connected to a wire splint in which the limb is supported by pieces of flannel attached to the bars. It is not sufficient that the limb should be simply lying in the splint; there is, in addition, plaster extension carried well up to the thigh and maintained by cross straps in the same way as if the leg were straight. It is said that by using this method of Hodgen the muscles of the calf and of the thigh are relaxed, and that the limb is therefore in a better position for the treatment of the fracture. I have asked patients treated with this apparatus whether it were comfortable, and they have said it was so; but, speaking for myself, I do not think the advantages claimed for it are sufficiently clearly proved, and it has never been much used in this hospital.

Let me here remind you of another method, which I have not lately been able to illustrate practically in my wards—a method of treatment of children with fracture of the thigh

FIG. 4.



invented by Mr. Bryant (Fig. 4). The child is suspended by its feet from a cradle, with splints on the broken limb, but both limbs are suspended for convenience, and extension is obtained by the weight of the child's body falling into the bed. The convenience of the position is very great, for the buttocks are well exposed, and the child can be easily kept clean.

Let us now consider these cases from the nurse's point of view. The management of the bed-pan is an important matter, and in the ward this afternoon I directed your attention to a very convenient plan, that of using a divided mattress. The division is made opposite the buttocks of the patient, and the interval is occupied by a cushion, which can be removed for the introduction of the bed-pan. Of course you can have regular invalid beds for these cases of fracture, such as are advertised in the journals; but these are all expensive and not adapted for hospital work, and I consider the plan of dividing the mattress an easier and better method.

We have, however, to consider the patient as well as the fracture, and you must bear in mind that your patient has been damaged by the accident, in some cases considerably damaged, and you have to treat that damage as well as the fracture. Your patient may be a man in good health, perhaps temperate, perhaps not; for to any inquiries you make on this subject you can usually anticipate emphatic denial of any excess. But you may find, as evening comes on, that your patient's temperature rises; that happens in any case of simple fracture, and you need not therefore be alarmed. Still if the temperature rises three or four degrees and your patient becomes restless—perhaps tries to get out of bed and kicks about the uninjured leg—then you have to deal either with a case of true delirium tremens, especially if your patient's health be undermined by drink, or with a

case of traumatic delirium, which may occur in any patient. In the case of traumatic delirium the patient seldom becomes violent, but is wandering and excitable. After a dose of morphia subcutaneously he will probably go off to sleep and do well, but if it be a drunkard who has a fracture you may find that he developes delirium tremens. The patient gets into a nervous, shaky condition, and after a day or two (the second night is usually the time) he becomes very violent and unruly, kicks about with his sound leg, displaces the apparatus for the fracture, perhaps pulls it off, and you will find the fracture dangerously disturbed. These cases are extremely troublesome to treat. In my student days we used to treat them with opium and brandy, and most of them died. Nowadays we give them chloral hydrate combined with bromide of potassium, and repeat it every few hours till the patient is quiet, at the same time giving him plenty of liquid nourishment and his beer. I say, "Give this class of patients beer" advisedly; they have probably been accustomed to a great deal of gin and other spirit as well as large quantities of beer, and if you cut them off these stimulants altogether the want is severely felt, and the result is unsatisfactory. If, then, you give them their beer and follow it up with a smart purge, as a rule you will find that the appetite returns and you get your patient through the attack.

In the treatment of fractures there is another point to be well borne in mind. On visiting a patient the evening after a fracture it is a good rule always to carry a catheter, as it may save going back for it; and you should never omit to inquire whether the bladder has been emptied. A man may have nothing wrong with his urinary organs, but after a fracture may be unable to micturate, and if left all night unrelieved will be in great distress and run a possible chance of cystitis. If the patient, therefore, has been some hours without emptying his bladder, pass a soft catheter and relieve him; he will sleep comfortably, and next morning will be probably quite able to pass urine himself. Another point I would lay stress on is that you should be careful about the patient's bed. You know, of course, there is a great variety in beds; but, if you can, have a narrow bed with horse-hair mattresses. With fairly well-to-do people you can telegraph to London for a single iron bedstead and two horsehair mattresses; it is only a matter of waiting a few hours, and not much expense. To treat a fractured thigh on an old-fashioned four-post bedstead with a feather bed is an almost impossible task. The advantages of having a single bed are that the "four-poster" can be removed from the room, thereby very much increasing the air space, and that the surgeon and nurse can so much more easily deal with the patient; but I am afraid you will not always be able to have horsehair mattresses, and in the houses of the poor you may have to be content with a flock mattress, which is not such a bad mattress to treat a fracture on, or you may have to manage with a straw palliasse. If you can have your patient on a flock mattress with a palliasse under that, he ought to do well; but in any case you must discard a feather bed, for the patient sinks down into it, and it is as impracticable as it is harmful. The use of fracture boards is not unusual in the treatment of these cases; boards are slipped in between the mattresses to make sure that the patient does not sink down too deeply, and this is important in cases where you have a heavy patient. The arrangement may be one large board the size of the mattress or separate boards inserted between the mattresses.

I now come to the consideration of the cleanliness of the patient and the state of his back. A good deal depends on the nurse. With a good nurse who understands her work the patient will be kept dry; the urine will be properly looked after, and even if the patient is an imbecile, passing everything under him, still a good nurse will keep everything right—but I hope you will not have many patients of that description. The best plan is to turn the patient on to his side and let the nurse wash the buttocks and back, and then dust them well over with some powder—oxide of zinc, for example, or the more common violet powder—preventing in this way any irritation. Always remember that if you once let the back get sore you will probably not get it well again, and that it is a very serious matter for the patient. Still, with every care the skin may become red, and it is well in that case to protect it. "Papier Fayard" is what I often advise; it is an unirritating paper plaster and very cheap, or you may prefer to use something thicker—as, for instance, plaster spread on kid or leather. The skin can also be hardened by rubbing it with a mixture of brandy and oil. If, however, your patient complains of his back, and on examination you find a black slough forming in the skin with unhealthy discharge beneath, you know then you are in for a bed-sore; and sometimes these sores rapidly increase in size and result in the death of the patient. Now when a bed-sore has reached that state nothing can be done till the slough is removed, and the best way to do that is to apply an old-fashioned linseed poultice well sprinkled with iodoform and to blow iodoform into the sore itself. After the slough has separated, stop the poulticing and stimulate the ulcer with red wash or some slightly stimulating ointment, and in that way you may hope to heal the bed-sore, though it will seldom become quite healed until the patient is able to get out of bed.

Remember also that elderly people are very apt to have some congestion of the lungs. The mere position in bed conduces to hypostatic congestion of the lungs, and if that congestion is allowed to continue it is apt to end in a low form of pneumonia, which may carry off the patient. In your cases of fracture, then, in old people, and especially in the winter months, if you find your patient suffering from chronic bronchitis, you must remember how the position aggravates the condition. For myself, in cases like this I encourage the patient to sit up as much as possible during the day, and with an ordinary fracture of the leg there is no reason why the patient should not be propped up, so that the passive congestion may be relieved by position and the bronchitis by expectoration. If, however, it is a case of fracture of the thigh, and especially if the fracture be high up, the difficulty is increased, but still you can support the patient's neck and the upper part of the back and help him to get rid of some of the mucus clogging his lungs.

The proper management of the patient's bowels still remains for consideration. In any patient kept in bed the bowels are liable to become costive and the liver congested, and particularly is this the case with the class of patients met with in hospital practice. Take, for instance, the case of a robust, healthy man who has met with an accident; after the first day or two he has practically nothing the matter with him, and he takes his food freely, the probability being that it is much better food and more of it than he has been accustomed to. The natural result is that his liver becomes congested and his bowels costive, and every now and then a patient like that gets a slight attack of jaundice simply because he has overeaten himself. The proper treatment then is to keep the bowels regular, but not purged. I find that the compound rhubarb pill answers very well; the patient has one or two free evacuations and feels very much better. I do not think it is wise to worry the patient's bowels with saline purges, and this particularly applies to elderly people, who probably do not over-load their stomachs with food.

I have now gone over most of the practical points in connexion with fractures of the lower limb, but have purposely avoided going into the details of each fracture, because I wished to-day to bring before you the more important points of practical utility bearing on the clinical aspect of the subject.

ST. MARY'S COTTAGE HOSPITAL, NORTHAM, SOUTHAMPTON.—The annual report of this hospital, which is devoted entirely to patients suffering from ulcers of the leg and diseases of the skin, shows that the new cases during the year ended Sept. 30th, 1895, comprised 420 out-patients and six in-patients, and that on Sept. 30th there remained under treatment 104 out-patients and one in-patient. The statistics, however, do not distinguish between the cases of ulcerated leg and those of skin disease. The year's income was £366, and the expenditure £370.

THE ROYAL HOSPITAL, RICHMOND.—A dinner in aid of the building fund of the Royal Hospital, Richmond, took place at the Star and Garter Hotel, Richmond, on Nov. 18th, 1895, H.R.H. the Duke of Cambridge in the chair, and subscriptions to the amount of £1587 were announced. The expenses incurred in making the necessary arrangements were less than £84, being only a fraction over 5 per cent. of the sum realised. The most munificent donations were those of Mr. Andrew Pears (£500) and Mr. J. H. Hilditch (£100). The hospital committee hope that the Princess May's ward for children will be opened early this year by H.R.H. the Duchess of York.

A Contribution

TO

MEDICAL HISTORY: THOMAS DOVER, M.B. (OF DOVER'S POWDER), PHYSICIAN AND BUCCANEER.

Being an Address delivered before the Historical Club of the Johns Hopkins Hospital, Baltimore, U.S.A.,

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As Sir Thomas Browne remarks in the *Hydriotaphia*, "The iniquity of oblivion blindly scattereth her poppy, and deals with the memory of men without distinction to merit of perpetuity." Thus it happens that Thomas Dover, the medical man, has drifted into our modern life on a powder label (to which way of entering the company of posterity, though sanctified by Mithridates, many would prefer oblivion, even to continuous immortality on a powder so potent and palatable as the *Pulvis ipecacuanhæ compositus*); while Thomas Dover, the Buccaneer, third in command, one of the principal owners, and president of the council of the *Duke* and *Duchess*—privateers of the ancient and honourable city of Bristol—discoverer of Alexander Selkirk (the original Robinson Crusoe), in spite of more enduring claims on our gratitude, has been forgotten. Of the facts of Dover's life very little is known. Munk[1] states that he was born in Warwickshire about 1660, that he was a Bachelor of Medicine of Cambridge, on the authority of the author of the "Athenæ Cantabrigenes," but that his name does not occur on the roll of the graduates. After taking his degree he settled in Bristol, and, having made money, joined with some merchants in a privateering expedition. "On Dover's return to England he resumed practice at Bristol, and from the number of patients he says he visited each day during an epidemic of the fever he must have obtained the confidence of the inhabitants of that city." In 1721 he settled in London and was admitted a Licentiate of the Royal College of Physicians. He resided in Cecil-street, Strand, but in the latter part of 1728 he removed to Gloucestershire, where he lived for four or five years, when he finally settled in London, at first in Lombard-street, and afterwards in Arundel-street, Strand, where he died probably in the latter part of 1741 or the beginning of 1742. In the "Dictionary of National Biography" essentially the same details are given by Dr. Norman Moore. In his work, "The Ancient Physician's Legacy," Dover often speaks with veneration of Sydenham as his master, and in his description of the small-pox he says "whilst I lived with Dr. Sydenham," so that he was probably a house pupil of the great physician, who was at the height of his fame at the very time we may suppose Dover to have been a student of medicine. As on the title page of the first edition of the "Legacy," 1732, he speaks of forty-nine years of practice, he probably took his degree in 1683. Apparently he never proceeded to a doctor's degree, since he speaks of himself as a "poor Bachelor of Physic." On the title page of the first edition, however, the letters "M.D." occur after his name. We know really nothing of Dover's life until he appears as one of the promoters of a privateering expedition to the South Seas in 1708. In this he was associated with a group of Bristol merchants, among whom were Alderman Bachelor and Sir John Hawkins. Two ships, the *Duke* and the *Duchess*, were fitted out with great care. Dover went as third in command, being styled Captain Dover, and as owner of a very considerable share of both vessels he was president of the council and had a double voice in the deliberations. The days of the buccaneers were almost numbered, but there was in Bristol at this time one of the last, and one of the most famous, of the old South Sea captains, William Dampier, a man who knew more of the Spanish Main and of the Pacific than anyone living. He had returned recently from a disastrous voyage, and agreed to accompany Captain Woodes Rogers as pilot of the expedition. In October, 1708, the ships—

> "..... sailed against the Spaniard, with his hoard of plate and gold,
> Which he wrung with cruel torture from the Indian folk of old"

—in which words Charles Kingsley well expresses the feelings which animated these highwaymen of the sea. The narrative of the voyage is told by Captain Woodes Rogers in "A Cruising Voyage Round the World, 1708–1711," London, 1712. The expedition was rendered memorable by the discovery of "Robinson Crusoe," which is thus told in the words of Captain Rogers: "We arrived at the Island of Juan Fernandez on the first of February, 1709, and having a good observation the day before, when we found our latitude 34° 10′ S. In the afternoon we hoisted out our pinnace, in which Captain Dover set off to go on shore, though not less than four leagues from the ship. As it grew dark we observed a light on shore, which some were of the opinion was from our boat; but it was evidently too large for that, and we hung up a light to direct our boat, firing our quarter gun, and showing lights in our mizen and fore shrouds that our boat might find us, as we had fallen to leeward of the island. Our boat came to board again about two in the morning, having turned back on seeing the light ashore when within a league, and we were glad they had got off so well, as it now began to blow. We were all convinced that the light which we had seen was from the shore, and therefore prepared our ships for an engagement, supposing it might proceed from some French ships at anchor, which we must either fight or want water. All this stir and apprehension, as we afterwards found, arose from one poor man, who passed in our imagination for a Spanish garrison, a body of Frenchmen, or a crew of pirates, and it is incredible what strange notions some of our people entertained about this light; yet it served to show their tempers and spirits, and enabled us to guess how our men would behave in case there really were enemies on the island.

"While under these apprehensions we stood to the back of the island in order to fall in with the southerly wind till we were past the island; then we stood back for it again, and ran close aboard the land that begins to form its N.E. side. The flaws came heavily off the land, and we were forced to reef our topsails when we opened the middle bay, where we expected to find our enemy, but all was clear and no ships either there or in the other bay near the N.W. end. These are the only bays in which ships can ride that come here for refreshments, the middle one being the best. We now conjectured that there had been ships here, but that they had gone away on seeing us.

"About noon of the second of February we sent our yawl on shore, in which was Captain Dover, Mr. Fry, and six men, all armed; and in the meantime we and the *Duchess* kept turning in, and such heavy squalls came off the land that we had to let fly our topsail sheets, keeping all hands to stand by our sails, lest the winds should blow them away. These flaws proceed from the land, which is very high in the middle of the island; but when they passed by we had little or no wind. As our yawl did not return we sent the pinnace well armed to see what had occasioned the yawl to stay, being afraid there might be a Spanish garrison on the island, who might have seized her and our men. Even the pinnace delayed returning, on which we put up the signal for her to come back, when she soon came off with abundance of crayfish, bringing also a man clothed in goat skins, who seemed wilder than the original owners of his apparel. His name was Alexander Selkirk, a Scotsman, who had been left here by Captain Stradling of the *Cinque Ports*, and had lived alone on the island for four years and four months. Captain Dampier[2] told me he had been master of the *Cinque Ports*, and was the best man in that vessel, so I immediately agreed with him to serve as a mate in the *Duke*. During his stay he had seen several ships pass by, but only two came to anchor at the island, which he found to be Spanish, and therefore retired from them, on which they fired at him, but he escaped into the woods. Had they been French he would have surrendered to them, but chose rather to run the risk of dying alone on the island than fall into the hands of the Spaniards, as he suspected they would either put him to death or make him a slave in their mines. The Spaniards

[1] Roll of the Royal College of Physicians, vol. ii.

[2] Selkirk had been sailing master under Dampier in his expedition which left England in May, 1703, and had been put ashore on the island at his own request. Dampier's expedition was unsuccessful, and "the merchants were so sensible of his want of conduct that they resolved never to trust him any more with a command."

had landed before he knew what they were, and came so near him that he had much ado to escape; for they not only shot at him, but pursued him into the woods, where he climbed up a tree, at the foot of which some of them made water and killed several goats, yet went away without discovering him.

"He told us he was born in Largo, in the county of Fife, Scotland, and was bred a sailor from his youth. The reason of his being left there was a difference with Captain Stradling, which, together with the ship being leaky, made him at first rather willing to stay here than to continue in the ship; and when at last he was inclined to have gone the captain would not receive him. He had been at the island before to wood and water, when two of the men were left upon it for six months, the ship being chased away by two French South Sea ships; but the *Cinque Ports* returned and took them off, at which time he was left. He had with him his clothes and bedding, with a firelock and some powder and bullets, some tobacco, a knife, a kettle, a Bible, with some other books, and his mathematical instruments. He diverted himself and provided for his sustenance as well as he could, but had much ado to bear up against melancholy for the first eight months and was sore distressed at being left alone in such a desolate place. He built himself two huts of pimento trees, thatched with long grass and lined with goat skins, killing goats as he needed them with his gun so long as his powder lasted, which was only about a pound at first. When all this was spent he procured fire by rubbing two sticks of pimento wood together. He slept in his larger hut and cooked his victuals in the smaller, which was at some distance, and employed himself in reading, praying, and singing psalms, so that he said he was a better Christian during his solitude than he ever had been before, and than, as he was afraid, he would ever be again.

"At first he never ate but when constrained by hunger, partly from grief, and partly for want of bread and salt. Neither did he then go to bed till he could watch no longer, the pimento wood serving him for both fire and candle, as it burned very clear and refreshed him by its fragrant smell. He might have had fish enough, but would not eat them for want of salt, as they occasioned a looseness, except crayfish, which are as large as lobsters and are very good. These he sometimes boiled, and at other times broiled, as he did his goat's flesh, of which he made good broth, for they are not so rank as our goats. Having kept an account, he said he had killed 500 goats while on the island, besides having caught as many more, which he marked on the ear and let them go. When his powder failed he ran down the goats by speed of foot, for his mode of living, with continual exercise of walking and running, cleared him of all gross humours, so that he could run with wonderful swiftness through the woods and up the hills and rocks, as we experienced in catching goats for us. We had a bulldog, which we sent along with several of our nimblest runners to help in catching the goats, but he outstripped our dog and men, caught the goats, and brought them to us on his back. On one occasion his agility in pursuing a goat nearly cost him his life, as, while pursuing it with great eagerness he caught hold of it on the brink of a precipice, of which he was not aware, being concealed by bushes, so that he fell with the goat down the precipice to a great depth, and was so bruised and stunned by the fall that he lay senseless, as he supposed, for twenty-four hours, and when he recovered his senses found the goat dead under him. He was then scarcely able to crawl to his hut, about a mile distant, and could not stir out again for ten days.

"He came at length to relish his meat well enough without bread and salt. In the proper season he had plenty of good turnips, which had been sowed there by Captain Dampier's men, and had now spread over several acres of ground. He had also abundance of cabbage from the cabbage palms, and seasoned his food with the fruit of the pimento, which is the same with Jamaica pepper, and has a fine flavour. He found also a species of black pepper called 'malageta,' which was good for expelling wind and curing gripes.

"He soon wore out his shoes and other clothes by running in the woods, and being forced to shift without them, his feet became so hard that he ran about everywhere without inconvenience, and it was some time after he came to us before he could wear shoes, as his feet swelled when he first began to wear them. After he had got better of his melancholy he sometimes amused himself with carving his name on the trees, together with the date of his being there and the time of his solitary residence.

"At first he was much distressed with cats and rats, which had bred there in great numbers from some of each species which had got to shore from ships that had wooded and watered at the island. The rats knawed his feet and clothes when he was asleep, which obliged him to cherish the cats by feeding them with goat's flesh, so that many of them became so tame that they used to lie beside him in hundreds and soon delivered him from the rats. He also tamed some kids, and for diversion would at times sing and dance with them and his cats, so that by the favour of Providence and the vigour of his youth (for he was now only thirty years of age) he came at length to conquer all the inconveniences of his solitude and to be quite easy in his mind. When his clothes were worn out he made himself a coat and a cap of goat skin, which he stitched together with thongs of the same cut out with his knife," &c.

Subsequently the expedition sacked the two cities of Guaiaquil, in the assault on which Dover led the van. They took several prizes and cruised about the coast from Peru to California waiting for treasure ships. Of one of the larger prizes, which they named the *Bachelor*, after the Bristol Alderman doubtless, Dover took command as chief captain. They then sailed across the Pacific to Batavia, where they refitted, and in October, 1710, sailed for England, which was reached in 1711. Captain Thomas Dover returned from the South Seas in 1711 a wealthy man; the expedition had been unusually successful, having realised the enormous sum of £170,000. To Dover, who is stated to have been the owner of a very considerable part of both ships, fell a large share of the spoils. Alexander Selkirk as mate received £800 prize money. Harris[3] makes the following comments on the voyage: "It has been universally allowed by such as are proper judges of such expeditions that there never was any voyage of this nature so happily adjusted, so well provided in all respects, or in which the accidents that usually happen in privateers were so effectually guarded against." This he attributes to the abilities of the gentlemen of Bristol, and remarks that it was owing to this expedition that the spirit of privateering in the South Seas was not totally lost in England. The large sums realised had evidently made an enduring impression, and Harris adds: "I might, perhaps, go too far should I assert that this voyage gave rise to the South Sea Company; but this much I can safely say, that the success of this voyage was what the patrons of that company chiefly insisted upon in their defence, when the plan of it was attacked as insufficient and chimerical."

In 1712 Dover must have been about fifty years of age, and quite ready to enjoy a period of pleasure. Where he settled or what he did we do not know, but it is certain that three years such as he had spent at sea were no preparation for practice. Possibly he travelled, and in the introduction to the "Ancient Physician's Legacy" he scoffs at the medical men who have travelled "far at home"; "let them take a trip to Hungary and see the mines," speaking and describing scenes as though he had been there himself. He refers not infrequently to his wide knowledge of the globe, and in one place says, "If travelling be necessary to make an accomplished physician I am very sure that I have travelled more than all the physicians of Great Britain put together." In 1721, as mentioned by Munk, he was admitted Licentiate of the Royal College of Physicians, a qualification which enabled a man at that time to practise in and six miles round Westminster. It is doubtful how long he remained at this time in London; at any rate, he states[4] that he lived in Gloucestershire in the years 1728 and 1729. None of the cases which he mentions in his book are of this period. His permanent settlement dates from about 1731. In an edition of the "Ancient Physician's Legacy," published in 1733, in replying to certain strictures on the use of quicksilver he says, "I challenge you to show when I have lost three patients for the past five years, when I was first called either in acute or chronic cases (though I have settled in town about eighteen months)." At this time Dover was well on in years, about or above seventy, a late age at which to begin practice in London. To abet his laudable endeavours he resorted to the time-honoured plan of writing a book. Of the popular or semi-popular treatises on medical subjects so common in those days a few were by very able men; for example, George Cheyne's "Essay on Health and Long Life" forms an exception to Latham's sweeping criticism on books of this class—quoted by W. A. Greenhill—"They are all bad, and many dishonest." A favourite plan was to

[3] Voyages. [4] Ancient Physician's Legacy.

write a treatise on some mineral water, and to laud the virtues of some particular Spa. Smollett, who knew so well the trials, vexations, and disappointments incident to beginning medical life in London, has sketched in strong lines the condition of the profession in the fourth and fifth decades of the century. He, too, had made an unsuccessful attempt to introduce himself in an "Essay on the External Use of Cold Water," &c. Dr. L——n with his "hotch-potch of erudition and extravagance," and the pedantic doctor in "Peregrine Pickle," in whom he satirised the learned Dr. Akenside, were well-known types; while in "Count (Dr.) Fathom" the "mystery" of the sons of Pæan, as he terms them, is mercilessly exposed. Among the "means used to force a trade"[5] Smollett mentions "the insertion of cures by way of news in the daily papers," the erection of a "hospital, lock, or infirmary by the voluntary subscription of his friends, a scheme which had succeeded in a miracle with many of the profession, who had raised themselves into notice on the carcases of the poor." To understand Dover's relations with the apothecaries (to which subsequent reference will be made) the reader must know that they were the general practitioners of that day and dispensed their own medicines, but in serious cases always called in a physician or a surgeon. Smollett's account of the practice "parcelled out into small enclosures, occupied by different groups of personages," who tossed the ball (the patient) from one to another, would almost fit modern usage, in which a patient is sometimes tossed in a circle from specialist to specialist until he returns with an inventory of his local woes to the consultant from whom he started. In Smollett's days the patient had to be content with three, except in the cases requiring a midwife. "The apothecary being summoned, finds her ladyship in such a delicate situation that he declines prescribing, and advises her to send for a physician without delay. The nomination of course falls to him, and, the doctor being called, declares the necessity of immediate venesection, which is accordingly performed by the surgeon of the association."

While meriting the general criticism of Latham, the work with which Dover trusted to reach practice had many important qualifications for success. It appealed directly to the public in a taking way, not alone in the main title, "The Ancient Physician's Legacy to His Country; being what he has collected himself in Forty-nine Years of Practice," but in asserting that the diseases incident to mankind are described in so plain a manner "that any person may know the nature of his own disease, together with the several remedies for each distemper faithfully set down." It is expressly issued as a popular work on medicine, "Designed for the Use of all Private Families." The writer's name is given, Thomas Dover, M.D., and the work was printed for him and sold by A. Bellesworth and C. Hitch in Paternoster-row, &c. (giving the names of two other booksellers), 1732, price, stitched, 5*s*. This is the title page, date, &c., of the first edition, a copy of which is in the British Museum. In the "Dictionary of National Biography" the date of the first edition is given as 1733. The mistake is due to the fact that in this year appeared an edition of the "Legacy" not stated on the title-page to be a second edition. This is the earliest copy in the library of the Royal Medical and Chirurgical Society and in the Radcliffe Library. The name is spelt *Dovar*, and the title-page is different. Forty-nine years of practice are still claimed (not fifty), and it is stated that "the extraordinary effects of mercury are more particularly considered." After the writer's name, Thomas Dovar, M.D., are the words, "with remarks on the whole by a learned physician." There is also a translation of a treatise on mercury "by the learned Belloste." It was printed for the relict of the late R. Bradley, F.R.S. The second and third editions I have not seen; this was probably one of them. The fourth and fifth editions also appeared in 1733, the sixth in 1742, the seventh in 1762, and the eighth, the last so far as I know, in 1771.

"The Ancient Physician's Legacy," in the language of one of Dover's correspondents, "made a great noise in London, and was the subject of almost every coffee-house." It contains a description in plain language of about forty-two disorders, illustrated by cases, the majority of which are made to attest in some way to the author's skill. The later editions abound in letters from grateful patients extolling his virtues. The pictures of disease are scarcely such as might have been expected from a pupil of Sydenham. The account of consumption or "phtisis," as he spells it, is very meagre, from the hand of a contemporary, possibly a friend of the author of the "Phthisiologia." There are evidences throughout that the book was written "for revenue purposes only," and the spirit of the buccaneer was not dead in the old man, as no occasion is missed either to blow his own trumpet or to tilt a lance at his colleagues. "Let me but come to People as early in this distemper [dropsy] as they generally apply for relief from other physicians, and it shall be cured," &c. On page 18, in the section on gout, is given the formula of his famous powder. "Take Opium one ounce, Salt-Petre and Tartar vitriolated each four ounces, Ipecacuana one ounce. Put the Salt-Petre and Tartar into a red-hot mortar, stirring them with a spoon until they have done flaming. Then powder them very fine; after that slice in your opium, grind them to a powder, and then mix the other powders with these. Dose from forty to sixty or seventy grains in a glass of white wine Posset going to bed, covering up warm and drinking a quart or three pints of the Posset—Drink while sweating." The same formula is repeated in the subsequent editions. He says that some apothecaries have desired their patients to make their wills and settle their affairs before they venture upon so large a dose as from forty to seventy grains. "As monstrous as they may represent this, I can produce undeniable proofs where a patient of mine has taken no less a quantity than a hundred grains, and yet has appeared abroad the next day."

In the treatment of fevers he follows the practice of the "good Dr. Sydenham," for whose memory he professes "the greatest veneration." "In this Distemper, as in all other Fevers, I prescribe the cool Regimen, which must be followed in case Mankind prefer *Life* to *Death*, *Ease* to *Pain*; a short Fit of Illness to a long and tedious one; a good to a broken and shattered constitution, laying aside Blisters and all heating and poisonous Powders." In another place he says, "I would have cold bathing grow as universal inoculation." He waxes furious against the "Unhuman Method of Blistering," and invokes the authority of Radcliffe and "the honest Dr. Sydenham" against it. When living with Dr. Sydenham, Dover had small-pox. In the beginning he lost twenty-two ounces of blood and had a vomit. He went abroad until he was blind, and then took to bed. "I had no fire allowed in my room, my windows were constantly open, my bedclothes were ordered to be laid no higher than my waist. He made me take twelve bottles of small beer acidulated with spirit of vitriol every twenty-four hours."

The experiences of his travels are referred to frequently, and he mentions Asia, the East and West Indies, and Hungary in connexion with special points in practice. There is an account of the plague among the sailors of the *Duke* and *Duchess*, "when I took by storm the two cities of Guaiaquil, under the line, in the South Seas." The Ancient Physician's chief legacy to his country was quicksilver, which was his specific in almost every disease, and the use of which is vaunted in a most forcible manner in letters from patients. He ordered an ounce or an ounce and a quarter of crude mercury daily, believing that "it freed the patient from all vermicular diseases, opened all Obstructions, and made a pure Balsam of the blood." A Captain Harry Coit, who had lived by the Doctor's direction "on Asses' milk, Syrup of Snails, and such stuff," took for his cough and shortness of breath an ounce a day, and took altogether a hundred and twenty pounds weight. Dover says that he was called in derision "The Quicksilver Doctor." The "Legacy" stirred up an active pamphlet war, and for twenty years or more the merits of crude mercury were much discussed. If Dover's object in writing the work was to gain publicity, he could not have taken a better way than in his sharp comments on the physicians and apothecaries. The latter he assaults in terms which must have tickled the frequenters of the coffee-houses, among whom we are told the book made such a noise. "I never affronted any apothecary unless in ordering too little Physic; and curing a patient too soon is, in their way of thinking, an unpardonable Crime. I must confess I never could bring an apothecary's bill to three pounds in a fever; whereas I have known some of their bills in this disease amount to forty, fifty, and sixty Pounds. If they can't cure with less charges I can't forbear saying that I have the same opinion of their Integrity as I have of their Understanding." The doctrine of the apothecary was that "'Tis your Writing-Physician only who has a Title to a Fee." Dover takes strong and most

[5] This seems to have been a stock phrase; Cheyne uses it in his "English Malady," in an autobiographical note.

reasonable ground against the constant varying of prescriptions when there is no occasion for it. The hostility of the apothecaries to him, according to his own account, arose from his being "always inviolably attached to the Interest and Welfare of my Patient and entirely regardless of these Gentlemen's unwarrantable Gains." These attacks did not pass unnoticed, and in 1733 H. Bradley, surgeon, criticises the "Ancient Physician's Legacy," and makes some "animadversions on his scurrilous Treatment of the Professors of Physic in general, with a word or two on the uselessness of his Legacy to all Private Families." Daniel Turner, "of the College of Physicians," who in the same year "impartially surveys the 'Ancient Physician's Legacy,'" refers to the Guaiaquil incident in the following terms: "I think the Doctor had much better have left out his bravado of having taken two cities by storm, unless he thinks it an honour to a physician to kill and slay, and after to plunder the innocent, those who never wronged him, and to carry off the spoil; a good prelude, this, to the bloodshed after among his own men." (Dover had had them bled copiously for the plague.) Turner hints that Dr. D——v's quicksilver did not a little to hasten the end of the celebrated tragedian, Barton Booth, to whom he had given between May 3rd and 8th within two ounces of two pounds of mercury.

Like his master, Dover's only affiliation with the Royal College of Physicians was through the minimum qualification of the Licence. Sydenham and Morton, the two most distinguished English clinical physicians of the seventeenth century, were regarded as innovators and "sectaries" by the heads of the College, who, as Sydenham remarks, took fire at his attempts to reduce practice to greater easiness and plainness. The coolness and moderation of the master were not imitated by the "Ancient Physician," who in the sixth edition attacks the gentlemen of the faculty, and warns unwary people "not to take every graduate for a physician nor a clan of prejudiced gentlemen for oracles." He added to his legacy the "Statuta Moralia," or, as he terms it on the title-page, "the moral conversation of the College of Physic in Latin and English, by way of appendix, together with a Digression." Dover affirms boldly that the whole purport of the "Conversation" is to conceal their ignorance and to deceive their miserable patients, but he avers his desire is "more to do justice to mankind than to irritate and provoke a Set of Gentlemen who, like moles, work underground lest their practices should be discovered to the Populace." He again refers to the relations of the apothecaries with the physicians in the following terms: "The Apothecaries, generally speaking, have it in their Power to recommend the Physician, which is the wrongest Step the Patient can possibly take: The Physician, to gratify the Apothecary, thinks himself obliged to order ten times more Physic than the Patient really wants, by which means he often ruins his Constitution, and too often his Life; otherwise how is it possible an Apothecary's Bill in a Fever should amount to Forty or Fifty or more Pounds? Nay, I have been credibly inform'd, that several of those Apothecaries have declared they never would call in a Physician, but what should put Fifteen or Twenty Shillings a Day into their Pockets: What must the Conscience of such Physicians be, that would forfeit their Reputation, and everything that is dear to them, by cheating for others? I would venture to say, Neither Sydenham's nor Radcliffe's Bills did ever amount to Forty Shillings in a Fever, and yet they recover'd their Patients without the Rule, at present prescribed, of Vomiting, Bleeding, and multiplying Blisters in all Cases whatsoever; so since this is to be their Rule of Practice, they are very indifferent in their Enquiries what the Patient's Disease is."

Dover continued to practise in London, and in the seventh edition of the "Ancient Physician's Legacy" there is a letter to him from Catherine Hood, dated Nov. 6th, 1738, in which she speaks of having consulted him in 1737. In 1742 appeared the sixth edition of the Legacy, which must have been issued by the author, as he speaks on the title page of fifty-eight years of practice. He is stated by Munk to have died in 1741 or 1742, probably the latter, but his name does not appear in the register of deaths in the *Gentleman's Magazine* in either of those years. Doubtless the old buccaneer, described "as a man of rough temper, who could not easily agree with those about him," was a striking figure as he passed along the Strand to the Jerusalem Coffee-house, where he saw his patients. A good fighter, a good hater, as, alas, so many physicians have been, his weaknesses and evil behaviour we may forget, but Captain Thomas Dover, who on Feb. 2nd, 1709, found "Robinson Crusoe," the world should not forget; and we also of his craft have cause daily to remember with gratitude the student and friend of the great Sydenham, who had the wit, in devising a powder, to remember his master's injunction: "Sine papaveribus, sine opiatis, et medicamentis ex iis confectis, manca et clauda esset medicina."

CASE OF A LARGE CYSTIC BRONCHOCELE NECESSITATING COMPLETE REMOVAL OF THE THYROID GLAND.

By SIR WILLIAM STOKES, F.R.C.S. IREL.,

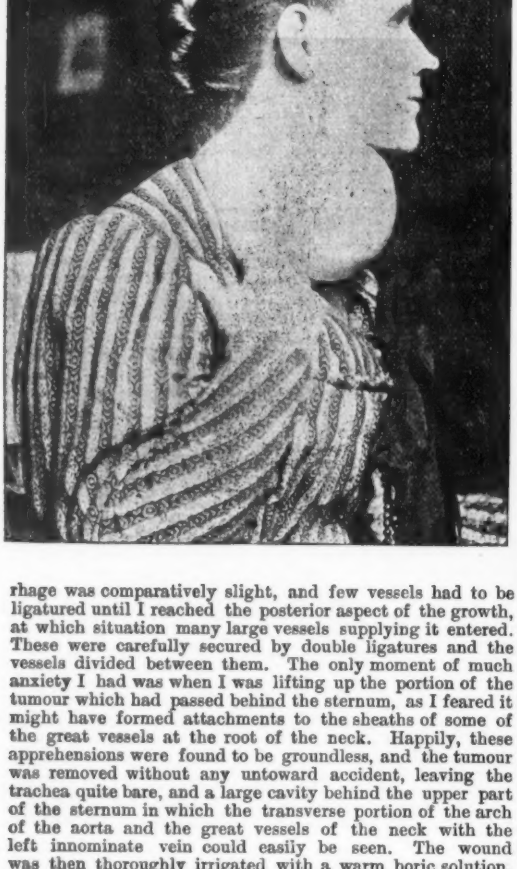
SURGEON IN ORDINARY TO HER MAJESTY THE QUEEN IN IRELAND; PROFESSOR OF SURGERY, ROYAL COLLEGE OF SURGEONS IN IRELAND, &c.

THE following case, in which I removed an exceptionally large cystic bronchocele, is, as all such cases are, replete with surgical interest. For many of the notes of the case I am indebted to Mr. W. Taylor, late house surgeon to the Meath Hospital.

A woman aged thirty-three, single, suffering from a large tumour of the neck, was admitted into the Meath Hospital under my care on March 13th, 1895, having been recommended to me by Mr. J. H. Fergusson of Killigordon, co. Donegal. The patient stated that the tumour had existed

as long as she could remember, but that latterly it had greatly increased in size. On two occasions it had been tapped by Mr. Fergusson, which operations were attended with a sensible, though only temporary, diminution in its size. On her admission the tumour was found to be very tense but fluctuating, extending from the chin to the sternum in the middle line and outwards to points well

behind the posterior margins of both sterno-mastoids. The chin rested on a sulcus on the upper margin of the tumour. Below, it appeared to pass downwards behind the sternum, which at the time of the operation I found it had done. The patient experienced latterly some difficulty in swallowing, especially solids, which she said always seemed to "stick" when they came opposite to the centre of the tumour. The diagnosis I made was that of cystic bronchocele, and I had no hesitation in recommending its excision. On March 20th, assisted by Sir P. C. Smyly, Mr. Hepburn, and Mr. Taylor, I removed the tumour. The patient having been anæsthetised by chloroform, I made in the middle line a vertical incision over it about three inches in length, and from the centre of this two incisions were made obliquely upwards and outwards, about one inch and a half in length. The skin flaps were then dissected off the tumour, which I then proceeded to enucleate. This was not attended with the difficulties I had anticipated, and which I had experienced in former excisions of the thyroid gland. The hæmorrhage was comparatively slight, and few vessels had to be ligatured until I reached the posterior aspect of the growth, at which situation many large vessels supplying it entered. These were carefully secured by double ligatures and the vessels divided between them. The only moment of much anxiety I had was when I was lifting up the portion of the tumour which had passed behind the sternum, as I feared it might have formed attachments to the sheaths of some of the great vessels at the root of the neck. Happily, these apprehensions were found to be groundless, and the tumour was removed without any untoward accident, leaving the trachea quite bare, and a large cavity behind the upper part of the sternum in which the transverse portion of the arch of the aorta and the great vessels of the neck with the left innominate vein could easily be seen. The wound was then thoroughly irrigated with a warm boric solution, and after being well dusted over with boracic acid its edges were brought together with very fine, carefully asepticised silk sutures, and a perforated glass drainage tube was inserted at the lower angle of the wound. After the operation the patient passed a quiet day and night, the only element of disturbance being a certain amount of nausea and occasional vomiting, due doubtless to the anæsthetic. On the following day, owing to there being evidence of considerable serous discharge, the wound was dressed. Its appearance was quite satisfactory, and the drainage tube was removed. During the convalescence of the patient the chief source of anxiety I had was owing to the development of an attack of broncho-pneumonia accompanied by considerable febrile disturbance; but on March 30th these symptoms subsided, the temperature (which had risen as high as 104° F.) was normal, and the wound had healed. From this time the patient's progress to recovery was uninterrupted, and she soon afterwards left for home in perfect health. As the removal of the thyroid gland was apparently a complete one I recommended the patient to take thyroid extract in small quantities daily, a suggestion which I hope is still being carried out. The last tidings received of the patient were all that could be desired.



The accompanying illustrations, taken from photographs, give faithful representations of the patient before and after the operation.

Dublin.

BRITISH GYNÆCOLOGICAL SOCIETY.—At the annual meeting, to be held on Thursday, Jan. 9th, 1896, the following resolutions of council (dated Feb. 28th and April 4th, 1895, respectively) will be submitted to the Fellows, with a view to their being added to the by-laws of the society:—1. That it is undesirable that any member of the medical profession practising homœopathy should be proposed as a Fellow of the society. 2. That it is contrary to the ethics of the British Gynæcological Society that any of its Fellows should advertise their publications or otherwise bring themselves before the notice of the public by advertising in any way through the medium of the lay papers. That circulars of the nature of an advertisement sent even to members of the medical profession generally would be regarded with disapprobation by the council.

ON AN OUTBREAK OF PERI-ORAL ECZEMA IN THE EAST-END OF LONDON.[1]

BY THOMAS D. SAVILL, M.D. LOND.,

A MEDICAL OFFICER TO THE ROYAL COMMISSION ON VACCINATION; EXAMINER IN CLINICAL MEDICINE IN THE UNIVERSITY OF GLASGOW; CLINICAL ASSISTANT AT THE HOSPITAL FOR DISEASES OF THE SKIN, BLACKFRIARS.

IT should be stated at the outset that the skin affection about to be described has no relation whatever, in my judgment, with the epidemic skin disease to which I directed attention in November, 1891,[2] beyond its epidemicity and seasonal incidence. When cursorily examined the eleven cases which were brought to the Dermatological Society of Great Britain and Ireland as specimens of the disease on June 14th, 1894,[3] seemed to bear a superficial resemblance to one or two of the younger and milder cases of the epidemic skin disease; but further investigation has entirely dispelled the resemblance.

My attention was directed to this outbreak by Dr. Guy E. Palmer, lately resident medical officer of the Mildmay Hospital, who had many cases under his care among the children attending the Newcastle-street Board-school, Shoreditch; and I found, upon following up the cases and visiting their homes, that the disease was also prevalent among the children in the district around. The following paper is based on some 700 cases which I saw in that way. Their investigation has occupied my available time for the past eighteen months. I am much indebted to Dr. Palmer for affording me the opportunity of studying this interesting occurrence, and for the courteous and valuable facilities he afforded me in my investigations. The history of the outbreak in the school will first be given; then a narration of a few cases, followed by an account of the clinical features and diagnosis of the disease; and finally the etiology, bacteriology, and treatment.

It is not desired to show that this disease is new, nor, indeed, that it is uncommon. But by studying so large a number of cases at one time one is enabled to acquire a fuller knowledge of the disease and its causation than by the investigation of isolated examples. For instance, three important features are thus revealed: (1) the remarkable uniformity of the eruption in its appearance and locality; (2) the spread from person to person by contagion; and (3) that the disease is confined to children under fourteen years of age.

HISTORY OF THE OUTBREAK IN THE SCHOOL.

The Newcastle-street Board-school is situated in a densely populated part of the East-end of London, close to Shoreditch Church, and the scholars attend there daily between the hours of 9 and 12 in the morning and 2 and 4.30 in the afternoon, Saturday and Sunday excepted. The children live at home with their parents, and, though all are surrounded for the most part with the squalor of the East-end poor, the environments of their home-life differ considerably one from the other. In school the children are grouped into four divisions, their ages ranging from three to thirteen years last birthday. The classes they attend depend, for the most part, upon their intellectual attainment rather than their age. The four great divisions are as follows: (1) the infants' department (both sexes) age three to eight years; (2) the junior mixed division (both sexes), age seven to eleven years; (3) the senior girls', age between eight and thirteen; and (4) the senior boys', age between eight and thirteen. The number of scholars on the books averages a total of 1040.

In the early part of April, 1894, a teacher in the Junior Mixed Division noticed a boy to have a red, scurfy patch on his face which she thought to be ringworm. She consulted the senior teacher on the question, and they then found that ten or twenty of the children in every class of the Junior Mixed Division were apparently affected with the same disease. Some of the children were "very bad," and they complained of the itching and irritation. All the teachers thought it must be ringworm, excepting one, who thought it could not be this disease, because, as she informed me, the patches "were not white in the middle." The headmistress of the Girls' School noticed that the patches did not come out all at once, but that as one got better a fresh one appeared. She considered the chin to be "the favourite starting-place, whence the patches spread to the cheeks and elsewhere on the face. One child had a patch on the back of the hand, but as a rule only the face was affected." The disease next appeared in the Infants' Division in the same building. Soon afterwards it appeared among the senior boys in another building, and finally among the senior girls, who are in the same building as the Senior Boys' Division. On April 20th, and subsequently, batches of thirteen or more children were taken at a time to Dr. Guy E. Palmer, at the Mildmay Hospital close by, who painted the patches with iodine.

The disease continued to spread amongst the scholars in all classes, and, the numbers being so large, the teachers applied iodine themselves to some of the worst cases. This gave rise to serious objection on the part of the parents in the case of a girl, whose teacher thereupon went herself to the medical officer of the School Board (May 23rd) and reported to him that they had a large number of cases of a scurfy, red skin disease on the faces of the children, which seemed to be a sort of ringworm and was undoubtedly spreading in the school.

On June 4th three medical gentlemen came down and inspected nearly 300 children—viz., 100 taken indiscriminately from the older boys', 100 from the older girls', and 100 from the infants' division. None were examined from the junior mixed school. They informed the headmaster that they found about 4 per cent. attacked with impetigo *of the scalp*, a very few cases of ringworm; and that a large number of the children's heads contained lice. There were not, they said, more than 1 or 2 per cent. of ringworm cases, and in these the disease was on the scalp.

Fresh children continued to be attacked with the red patches on the face; and, at the suggestion of Dr. Palmer, some typical cases were sent to the London Hospital, where the facial patches were declared not to be ringworm.

On June 7th this gentleman kindly asked me to see the children, large numbers of whom were at this time under his care, and on June 8th I went to the hospital and school and examined a great many cases in consultation with him. I was informed on that occasion that about one-half of the school children had one after another been attacked by the disease. How near this estimate was to the truth may be seen from Table A (*v. infra*), which shows that on June 18th there were then 44·1 per cent. of the children actually suffering from the malady, without counting those who had recovered. Between June 18th and July 27th, when the holidays began and the school closed, many more children were attacked, and my own estimate would be that sooner or later during the spring and summer of 1894 nearly 60 per cent. of the children in that school were at some time affected.

I spent the greater part of June and July, 1894, in the East-end examining these children and following up the cases to their homes. Dr. Eddowes was also kind enough to see them with me on two or three occasions, and some were brought before the Dermatological Society of Great Britain and Ireland on June 14th, 1894.[4] Altogether I saw and examined some seven hundred children suffering from the malady—some at school, some at the hospital, and some at their own homes—some of whom attended school and others who did not. The eruption presented remarkable uniformity in its characters and distribution. The following histories present some typical examples and also some aberrant items of interest. The only children (four in number) of those I saw who were known to have patches elsewhere than on the face are here mentioned.

CASES.

Senior Boys' Division.

CASE 1.—A boy aged twelve, a pale, intelligent, clean, and tidy lad, stated that he had had rheumatic fever three

[1] A paper read before the Dermatological Society of Great Britain and Ireland on Nov. 27th, 1895.

[2] Transactions of the Medical Society, 1891-92, and a monograph published by H. K. Lewis, London.

British Journal of Dermatology, August, 1894, p. 244.

[4] Ibid

or four times. He had when seen on June 8th, 1894, several patches on the face, chin, and neck, though none elsewhere. These were of a red or pink colour, slightly raised, flat, and covered with tiny scales and cracks in the epidermis. All the patches were quite dry; none were healing or white in the centre, and none had the border raised above the centre. The newer patches were more crimson, scaly, and cracked. The older ones looked simply like yellow, scurfy skin. There were in all about ten patches, ovoid or irregular in shape, varying in size from a threepenny piece to a shilling, and were distributed without marked symmetry round the orifices of the mouth and nose and on the neck. The hair and scalp of this child were perfectly clean and healthy, and there were no patches on any other part of the body. Microscopic examination of scrapings from the facial patches by Dr. Eddowes and myself failed to detect any trichophyton spores or mycelium. The patches itched a good deal, especially when wetted, and sometimes smarted, but otherwise he suffered no inconvenience. The boy stated he had had the disease more or less for about eight weeks, but the patches had come out successively, first on the right side of the neck, then on the cheek, a recent one on a level with the lobe of the right ear, scale was extremely rare—indeed, this was almost the only case I saw where such a condition occurred. By the 23rd another fresh, round, crimson patch, about the size of a shilling, had appeared under the chin; the outline was well marked, but not raised, and it was not healing in the centre. On this day I visited the lad's home. The family consisted of father, mother, a daughter aged twenty-three, a son aged twenty-one (none of whom were affected), and the patient, aged twelve, and occupied two badly ventilated first-floor rooms measuring about 10 ft. by 10 ft. by 7 ft. The mother, a respectable, intelligent woman, confirmed the lad's history and added that when the patches appeared on his face some weeks before her daughter exclaimed, "Look what a state W——'s face is in, we must not wash on the same towels as him"; and, "We thought it was ringworms." The peri-oral distribution suggested something going into or out of the mouth as a possible cause; so careful inquiry was made. The boy used to have bread-and-butter and tea for breakfast, and these often constituted his other meals also; sometimes rice and milk for dinner, and bread-and-butter for tea; sometimes a small piece of fish and fried potatoes for supper, and some meat once a week—on Sundays. His pallor and general health were quite accounted for by

and finally, only two days previously, an oval spot on the neck just below the lobule of the left ear (which does not appear in the sketch). When examined with a lens this recent patch could be seen, and could be felt to be slightly papular in texture; it had an abrupter margin than the others, though it was not at this time scaly (June 8th). By June 11th (sixth day) it had grown and become scurfy and flatter. On the 13th (eighth day) the bright crimson colour was fading a little, and the patch looked more cracked. (The above sketch was made of him on this day.) There was no alteration on the sixteenth day. By the twenty-first day it was quite flush with the surface, and the colour of the patch was orange-yellow, covered with scanty, powdery scales. Almost all trace of it had gone in five weeks. This patch was never submitted to treatment. When I saw the boy on June 15th a fresh patch had appeared on the right eyebrow, slightly red and scurfy. Photographs and scrapings for cultures were taken on this day. There was a little scale at the left corner of the mouth, as of vesicles, which had come during the preceding day or two and dried up. (See engraving.) This scale was removed for examination. (See below.) This definite formation of a his mode of life and the ill-ventilated atmosphere in which he spent his nights and part of his days. He was, however, cleaner than most of his class, and I was informed that he had a bath once a week and washed his hands and face two or three times a day, using "best yellow soap at 4*d*. a pound."

CASE 2.—A boy aged eleven, when seen on June 8th, 1894, had circular, slightly raised, red patches, with sloping borders, on the face and neck, chiefly round the mouth. The patches were irregularly ovoid, varying in size from one line to one inch. His head was perfectly clear, with the exception of some empty nits, and no other part of the body was affected. I saw him again on June 15th and 23rd at his home. It was a good class of house with four rooms, occupied by mother, father, and eleven children, of whom three, aged thirteen, eleven, and nine respectively, were affected with the patches. Sunlight soap was used by all the family, who seemed well-cared-for. The mother had first noticed the patches on the boy's face about Easter (March), and they had come out in succession first on the left side of the face and then on the right, as the others got better. The children had been successively attacked, the mother

stated, "by catching it from one another". He complained of all the patches itching a good deal, and stated that he sometimes scratched them.

CASE 3.—A boy aged nine, when seen on June 8th, 1894, had patches precisely similar to those of the last case on his face, none elsewhere, and the head was clean and free from scurf. I visited his home on June 23rd. There were eight in the family, three of whom were affected with the disease. The mother expressed her belief that "they was ringworms"; at any rate she was sure "they was ketchin," because she herself had infected "J——," aged five, by washing him with the same flannel as "W——" (the patient). The latter had had the disease for three or four months, patch after patch coming out. She washed her children with "fourpenny yallow" soap. She also informed me that a lot of children in the same street had the disease, and W—— had caught it from his "pal" next door.

CASE 4.—A boy aged ten, when seen on June 11th, 1894, had several patches on his face and pointed to a new patch which was less scurfy, more inclined to be papular, and slightly more raised than the others. The first patches, he said, came "five weeks ago." On June 25th I visited his home. There were three children besides the patient, all younger. Two of the four were affected with the disease. The soap used was "Watson's cleanser," and occasionally "carbolic soap." The mother stated that her children were subject to the disease every spring, and that she gave them some "cooling medicine" for it. The house was tidy, but the food was poor, and they only had meat once or sometimes twice a week.

CASE 5.—A boy aged eleven, when seen on June 19th, 1894, had red, scurfy patches beside the nose and round the chin; none of them very large, but scurfy, dry, and cracked. He said he was subject to these patches every year and did not know when they had first come out. The head was clean. In colour his patches were yellowish and appeared to be fading. He had some recent patches—that is, redder ones—in the popliteal space, where the garter is worn. The head and other parts of the body were clean and free from disease.

CASE 6.—A boy aged eleven, when seen on June 11th, 1894, had very slightly raised, ovoid patches, not healing in the centre, scaly and cracked on the surface, over the face and round the mouth, forehead, and nose. This boy had ringworm of the scalp, being one of the six cases of that disease which I saw during the whole of my investigations.

CASE 7.—A boy aged nine, when seen on June 11th, 1894, had patches on his face which differed a little from the common type in that the margins were slightly raised and crescentic, though the centre was not healing. As a rule the edges of the patches were ill-defined.

CASE 8.—A boy aged ten, seen on June 11th, 1894, had several irregular, slightly raised, scurfy, red patches round the mouth and nose. One of them had only come out the day before, and this was redder than the others, not scurfy, and to the finger felt distinctly papular, though the patches were fused in one red mass.

Senior Girls' Division.

CASE 9.—A girl aged thirteen, when seen on June 15th, 1894, had had patches on her face in succession for about three weeks—red ovoid patches, very slightly raised, with fading margins, and covered with a slight, dry scurf. On the 29th there were still many patches on the face, some measuring half by one-and-a-quarter inches, but these were now fading. She had nits in the hair, but no ringworm or scurf on the scalp. The rest of the body was clear. On July 14th I visited her home. She had five brothers and sisters, aged from eighteen downwards, all of whom, the mother said, had been subject to the disease, when younger, in the spring time for some years. It was the three younger children in the family who were now affected, but only one, a sister, went to the same school as the patient.

CASE 10.—A girl aged eleven, when seen on June 18th, 1894, had two ovoid patches situated round the corners of the mouth, that on the right side having come out six days previously, that on the left four days, and the younger patches seemed redder and less scurfy. Judging from this case, the patches seemed to require approximately four or five days to become scaly. The older patch was becoming a little cracked. This child had had many patches of larger size round the nose and across the forehead. The scalp was perfectly clear, and there were no patches anywhere else. I visited her home on July 14th. She had three brothers and sisters, two older, who went to the same school and had patches, while the younger one, who did not go to school, had none. The mother stated that the patient had had patches now and again in former years in the spring time. All the household were using carbolic soap when the patches came out four or five weeks previously; since then they had used curd soap.

CASE 11.—This was a case of impetigo. On June 18th, 1894, I saw a child in the girls' school with typical impetigo contagiosa of the face, but the headmistress said that she was the only one out of 170 girls having sore spots like those. A week later I saw this child. The scabs had gone, leaving the usual reddened skin, quite unlike the patches of eczema now being described.

CASE 12.—A girl aged ten, when seen on June 18th, 1894, had three separate patches, and she was sufficiently intelligent to tell us the ages of these. One, on the side of the neck, below the left ear, was one week old, and felt distinctly papular, hardly at all raised, with a fading margin, and only slightly scurfy. The patch at the right corner of the mouth was one month old, and was uniformly red, slightly raised, and cracked, and covered with scales. A faded patch beside the nose had come several weeks previously. The head was quite clear, except for nits, and there were no patches on the body. I visited her home on July 14th. The new patch on the side of the neck had then become twice as large as before, and was cracked and flat; the other was fading away. The oldest of all had gone. She had one elder sister and five brothers and sisters younger than herself; two of the latter had the disease—a boy aged seven, who went to the same school, and the infant, aged six months. "Fourpenny yellow" soap had always been used.

Junior Mixed School.

CASE 13.—A girl aged nine, when seen on June 8th, 1894, had some slight patches, which disappeared under treatment, on the face, and one ovoid, marginated patch on the inner surface of the left thigh, having the usual characteristics, and not fading in the centre, which was about two weeks old. I visited her home on July 23rd. She had four brothers and sisters, all of whom were free from the disease. All their heads were clear except for nits. "Threepenny yellow" was the soap used.

CASE 14.—A girl aged eight was seen on June 8th. She had the same scurfiness of the face, and also severe ordinary eczema in the flexures of both elbows, but this presented a very different appearance from the other condition and was moist with exudation. I visited her home on June 23rd.

CASE 15.—A girl aged nine had had patches on the face, which had been treated and were nearly faded. This child also had a patch at the back of the left leg.

Infants' School.

CASE 16.—A girl aged five when seen on June 11th, 1894, had patches over the eyebrows covered with white branny scales, and flat oval patches beside the mouth. The oldest was said to be about two months old. The patches beside the mouth were about one or two weeks old and had not been treated. The head was clear, as were other parts of the body. I visited her home on July 23rd, 1894.

CASE 17.—A girl aged seven was seen on June 11th, 1894, then a recent case. The patches on the face had appeared about six days before, and she had also patches behind the knees.

CLINICAL DESCRIPTION.

In a letter to me (June 7th, 1894) Dr. Palmer very graphically described the disease as "a very superficial dermatitis occurring in ovoid or irregular patches, limited to the face and neck, not on the scalp, resembling tinea corporis as much as anything I am acquainted with, but I can find no mycelium or spores under the microscope." These patches differed in size from 1 line to 1½ in. They did not appear all at once, but successively, and it seemed to me, as I followed the history of each separate patch, that it presented three unequal stages for description.

1. *Crimson stage.*—Appearing as a small red mark, a patch would grow during two or three days to an oval, circular, or irregular red plaque. Each patch, examined by a strong lens, consisted of a slightly raised confluence of microscopic red papules, the redness disappearing on pressure, and not at this time covered with scales. In certain cases at an early stage some of these little papules, on inspection with a strong lens, would appear to contain a clear, whitish fluid, as

on the side of the neck in Case 12. Each patch gradually grew at the edges, but never healed in the centre.

2. *Dry scurfy stage.*—At the end of about two to five days the surface of a patch, still remaining crimson, becomes covered with tiny flakes of cuticle and cracked, but no moisture exudes. The patch is now hardly raised above the surface. Its margins grow, sometimes being slightly raised, more generally sloping into healthy skin, and the centre does not heal. The tiny papules can no longer be seen or felt, and the whole patch presents a flat, uniform appearance. It lasts in this condition for some two or three weeks, as far as I could judge, the colour gradually fading.

3. *Fading stage.*—If the colour fades early it looks simply like a patch of ordinary colourless "chapped" skin; but more often there is left a brown or orange stain, covered with a layer of tiny scales. The total duration of each patch is about three to five weeks, perhaps more. Many of the children had been affected with a succession of patches for two or even three months.

This was the progress of the eruption in about 90 or 95 per cent. of the cases I followed, and it is especially to be noticed that there was a remarkable uniformity in the type of the disease; nothing approaching polymorphism could be detected. In a very few instances—say 1 per cent.—the second stage of the disease was attended with the formation of crusts or exudation, as at the corner of the mouth in Case 1; on the ear in another case; or at the back of the neck beneath the collar band in another. In these cases the children complained of the patches having itched a great deal, and the vesicles and exudation were probably due to the rubbing. None of the patches were ever attended by the formation of pustules.

Locality.—The eruption was always found on the face, hardly ever on the trunk or limbs, and was always grouped round the orifices of the nose and mouth, not usually with any symmetry. In addition to the face it might sometimes be found on the neck—the order of frequency being on the front, sides, and back. Sometimes there were also patches on the ears; but none could ever be discovered on the scalp, though this was always carefully examined. In only four children out of about 700 cases was any of the eruption discovered on the trunk or limbs. One of the boys had a patch on his leg; a girl one behind the knee; another girl on the inner surface of the thigh; and a third girl on the back of the leg.

The scalps were remarkably clear and free from scurf or seborrhœa, though the hair of most of the boys, which was kept very short, and that of nearly all the girls, contained nits, mostly dead, and a few living pediculi.

We could only find five cases of ringworm of the scalp, and one of the scalp and the body, among all the children examined. In the last-mentioned Dr. Eddowes discovered the characteristic spores and mycelium. Twelve or thirteen of the school children had impetigo of the scalp, and one of the face. None of these children were subjects of facial or peri-oral eczema, and I came to the conclusion that, whereas 44 per cent. were suffering from peri-oral eczema, not more than about 3 per cent. could be described as having any condition which corresponded with impetigo in any stage. The impetigo was, with one exception, situated on the scalp—a part of the body which was absolutely free from the disease under consideration.

As regards *subjective and constitutional symptoms* many children complained of itching, burning, and smarting, and their parents complained of the disfigurement, but in none did the disease affect their general health in any way. The boy described under Case 1 complained of feeling weak when the eruption first appeared, but that was accounted for on other grounds. Some few children were kept away from school, on account of the contagiousness of the disease, but the patients themselves experienced no constitutional symptoms.

DEFINITION.

After examining several hundreds of the children and their brothers and sisters at home I came to the conclusion that the chief clinical characters of the disease were: (1) the distribution around the mouth; (2) the uniformity of appearance as red, dry, scurfy patches; (3) the fairly uniform course and duration of each patch; and (4) that it was practically confined to children under fourteen years of age. Anatomically the disease consists of a catarrhal process of the epidermis. The very constant resemblance to the appearance of a dry eczema, and its equally constant distribution around the buccal and nasal orifices, have induced me to suggest the name "peri-oral eczema." The close resemblance of the cases to one another and their differences from other affections entitle the disease to a distinctive name. It may be provisionally defined as a contagious malady, consisting of dry, red, scurfy, ovoid patches, each of which tends after a few weeks to spontaneous recovery; confined to the face and neck; rarely attacking children over fourteen, and only during the summer months of the year.

PREVALENCE.

The eruption is certainly not a new one, and probably corresponds to the condition known by a variety of names, such as the "soap rash of children," "seborrhœa sicca" (Tilbury Fox), &c. The disease is also probably not an uncommon one, and, as Dr. Stephen Mackenzie remarked,[5] cases might probably be found by careful search in any large school, though I believe only in the summer time. I am, moreover, inclined to think that the disease was especially prevalent in London in 1894, both because of the amount of attention the outbreak at Newcastle-street schools attracted; and also because I observed and heard of many other cases, both in private and hospital work, during the summer and autumn of that year. I saw cases among the out-patients at the Blackfriars Skin Hospital (among them a boy whose infant sister had "taken" it from him), and at St. Mary's Hospital I saw a girl aged seventeen; and outbreaks at other Board schools in the East-end of London were mentioned to me.

DIAGNOSIS.

1. *Eczema.*—A typical patch during the greater part of its existence does correspond in appearance with dry or squamous eczema; but the generally ovoid shape of these patches and their strict limitation to the face and neck are features which do not precisely correspond with the description given of any of the numerous forms of eczema. Nor was there ever any moisture observable except in the rare cases where vesicles formed in positions specially exposed to irritation. Ordinary eczema is not so strictly confined to children under fourteen, nor has it hitherto been known to occur in epidemics like this.

2. *Ringworm of the body* (tinea circinata, tinea corporis) was what most of the teachers—intelligent persons who have ample opportunities of studying that disease—thought it must be, and undoubtedly the two diseases have superficial resemblances; but (1) only one child was found to be affected with the facial disease who also had ringworm of the scalp, and he had likewise a typical patch of tinea corporis on the neck, which illustrated side by side the differences of the two diseases; (2) none of the facial patches showed the raised circinate margin and healing centre which is so characteristic of tinea corporis; (3) careful search in several instances failed to find the typical spores and mycelium of trichophyton tonsurans; and (4) none presented the fading centre of tinea.

3. *Eczema seborrhœicum* (Unna)—i.e., a seborrhœic condition of the scalp infecting the body and producing eczematous patches elsewhere.[6]—In texture the two eruptions are very similar, but the special predilection for the face and avoidance of other parts of the body is not like Unna's disease, which is prone to attack the back, chest, and other parts. Careful inspection of these children proved them to be remarkably free from seborrhœa capitis and dandruff, though often infected with pediculi. The extreme shortness of most of the boys' hair enabled one to be quite satisfied on this point.

4. *The reddened skin left after impetigo contagiosum.*—To one who followed the origin and progress of these patches from day to day it would not be possible to confuse the non-pustular disease in question with the pustules or scars of impetigo; but even when seen for once only the scurfy epidermatitis had a very different appearance from the smooth red patches, often with dried crusts still adherent, seen after impetigo. The facial patches were always dry and desquamative from about the third day to the very end, and were never pustular at any time. As already mentioned, a small proportion of the children had undoubted impetigo, but this was, with one exception, on the scalp, a part entirely free from the other disease. The two conditions have nothing in common

[5] Discussion by the Dermatological Society of Great Britain and Ireland, August, 1894.

[6] Vide Anderson's treatise on Diseases of the Skin, second edition, p. 222.

except their favourite locality, and their attack-rates in the school were widely different—3 and 44 per cent. respectively.

5. *The epidemic skin disease.*—All the cases of epidemic skin disease to which I drew attention in 1891 were undoubtedly due to a common cause, which consisted, in my opinion, of a specific contagium, but the cases presented wide clinical variations both as regards severity and the character of the eruption. At first sight it seemed to me as though we had to do with the same disease,[7] for the patches of facial eczema closely resembled some of the youngest and slightest of the cases in 1891, and especially that of a little boy aged four, who had a few such ovoid patches on the chest and abdomen, lasting for two or three weeks. Moreover, both diseases were desquamative throughout the greater part of their course. The differences, however, are very great. The epidemic skin disease, though of widely varying type, is more or less general in its distribution on the body and shows a marked tendency to attack those in advanced life. It is usually attended by other symptoms (weakness and anorexia) and had a fatality (case-mortality) in the year 1891 of 12 per cent.; whereas this peri-oral eczema is of a much more uniform type, only attacks children, is practically always confined to the face, is never general, and is never attended by disturbance of the general health or danger to life.

ETIOLOGY.

1. *Age.*—The disease is particularly prone to attack children under fourteen. It is true that two of the teachers in the school building were affected, but these were almost the only adult patients I saw. There were a few cases in the children's homes aged between fifteen and twenty. In eight homes, taken haphazard, containing sixty-seven persons, there were:—

7	persons	exposed,	aged	0–5	years,	of whom	3	were attacked	(43%)
18	"	"	"	5–10	"	"	9	"	(50%)
15	"	"	"	10–15	"	"	8	"	(53%)
8	"	"	"	15–20	"	"	none	"	"
19	"	"	"	20 and upwards,		of whom	none	were attacked.	

Total: 67 persons exposed, of whom 20 were attacked (29·9%).

On account of the children being classified in school more by intelligence than age it is impossible to say with certainty in which year of life under fourteen they are most prone to suffer. The table below suggests that the younger children suffered most, at least among the girls.

2. *Sex.*—It will be gathered from the same table that the disease was much more prone to attack boys than girls, the total attack-rate amongst the boys being 52·7 per cent., and that amongst the girls 35·4 per cent. This difference was evident even where both were equally exposed to contagion.

3. *Previous health.*—As regards the previous health of the children attacked, the mode of life of nearly all the school-children was not such as to favour a vigorous state of health, but the more weakly ones did not seem to be attacked more readily than the stronger children.

4. *Food.*—The distribution of the eruption round the mouth suggested that the food might be causally related, but that taken by the children varied very considerably in the different homes and was obtained from many different sources. They all ate bread and drank water, it is true, but the bread was obtained from many different bakers and varied considerably in quality. The water-supply also was from at least two different companies.

5. Dr. Eddowes, who saw many of these cases with me, suggested a *discharge from the mouth or nose* as a source of the eruption, and we attempted to ascertain from the children whether the side which was most affected was that on which they slept, but exact information was difficult to collect on this point. Nevertheless, the constant distribution of the eruption round these orifices is very suggestive of such a cause.

6. *Soap and washing.*—Mr. Hutchinson, when the children were shown at the meeting in June, 1894, asked particularly about the soap, and careful inquiry was made. The impression I formed was that, generally speaking, very little of any sort was used. At the school-house carbolic soap was supplied, but the headmaster stated that only about ten or twelve of the children were known to wash during the week. A large variety of the different kinds of soap was in use in the different homes, such as "fourpenny" and "threepenny" yellow soap, carbolic, curd, Watson's cleanser, &c., and no causal connexion could be traced. In the same year (1894) I heard of and saw many instances of precisely the same disease occurring among families of the upper classes, so that it is not only dirt and squalor which produce, though these may probably facilitate the spread of, the disease.

7. *The drainage and sanitary conditions* of the homes visited, and of the school buildings, were, as far as could be ascertained, fairly good.

8. *Season.*—No cases arose among the children during the winters of 1893–94 or 1894–95. The first cases were noticed about April. The height of the epidemic was at the end of June and beginning of July. Very few of the children were found to be affected on their return to school in September, and only a few isolated cases occurred in October and November, 1894. A very much milder outbreak, though similar in all other respects, occurred, I am informed, in the summer of 1895 in the same school. Season has, therefore, a very marked influence, and the disease may be said to be almost confined to the summer months. The summer of 1894 was not remarkable for any climatic peculiarity. It was an average English summer.

9. *Contagion.*—1. That the disease is contagious, or at any rate epidemic, amongst children is rendered highly probable from the large number of children attacked at one time and in one place by a disease having specific and recognisable qualities. In order to arrive at some idea as to the exact number of children affected on one particular day I visited the school with Dr. Palmer and procured a return of the numbers attacked in the several departments on June 18th, 1894. From the subjoined table it will be seen that 44·1 per cent. of the children present in the school on that date had the disease. These figures may be taken as correct, for on that day I had an opportunity of going through the class-rooms, and by making those children who had patches on their faces stand up and inspecting them one could readily arrive at the proportion affected. It should be remembered also that this was after the outbreak had been going on for eleven weeks, that some of the children originally attacked were now well, and that others were attacked later. It may therefore be taken that at least half the children attending the Newcastle-street school were attacked during the months of April, May, June, and July, 1894. But these only represented a portion of those affected in that neighbourhood; for I generally found, on visiting their homes, that two or three other members of the family (not perhaps attending the same school) were also attacked, leading me to form the rough estimate that at least 1100 or 1200 children in this district were affected by the disease. II. Its infectiousness is further shown by the evidence of the teachers as regards its origin and progress through the school, for class after class was rapidly affected. The junior mixed school was first observed to be attacked, and next the infants' division, which was in the same building, followed soon afterwards by the boys' division in a separate block, and, finally, the girls' division, which suffered least and was housed in the same block as the last-named. III. Moreover, two of the teachers (who, though adults, were especially exposed to infection) also contracted the disease. IV. Many of the mothers conclusively showed that it spread from one to another of their children and were so strongly convinced of its contagiousness that they kept separate towels for the ones affected. Instances were mentioned to me in which a child took the

Table showing the Number of Children present in the School on June 18th, 1894, and the Numbers suffering from Peri-oral Eczema in the several Divisions.

Department.	Sex.	Age last birthday between—	Children affected out of total in class or division.	Attack-rate (per cent.).
Infants	Boys	3 and 8	89 out of 189	47·0
	Girls	3 " 8	75 " 177	42·3
Junior mixed ...	Boys	7 " 10	48 " 107	44·8
	Girls	7 " 11	39 " 117	33·3
Senior girls	Girls	8 " 13	41 " 144	28·4
Senior boys	Boys	8 " 13	96 " 146	65·8

SUMMARY.

233	cases among	442	boys, or 52·7 per cent.
155	" "	438	girls, or 35·4 per cent.
Totals ... 388	" "	880	children—44·1 per cent., who were present in the school on June 18th, 1894.*

* There are upwards of 1000 scholars belonging to this school, and this represents an average attendance on one day.

[7] British Journal of Dermatology, August, 1894, p. 264.

disease from a neighbour's child with whom he habitually consorted, and then propagated the disease to a brother with whom he slept, and so on through the younger children in the same house. Others, again, voluntarily declared that it spread from child to child if they were allowed to use the same towel or flannel to wash (e.g., Case 3 *ante*).

If, therefore, the disease be contagious in the ordinary sense of the word—and I myself have no doubt on that point—the next question is, By what means was the contagion conveyed? That the disease was not conveyed by water is rendered improbable by there being two different water supplies to this neighbourhood. The same argument applies to food. But the remarkably uniform habit which children, especially of this class, have of wiping their noses and mouths with the backs or fronts of their hands seems to me the most reasonable explanation of the distribution around these orifices. It may be that the *materies morbi* issues from the sufferer's own mouth and nose and is thus smeared around after the manner of a locally contagious eruption; or, in view of its undoubted contagiousness from person to person, it seems to me equally likely that the contagion is conveyed by the hands of another child suffering from the disease, who first rubs his own nose and then clasps his little comrade by the hand, who in turn wipes his nose and mouth in the manner just mentioned. The habit of kissing may also have promoted spread in the younger forms, but not in the older boys' division, which was most affected.

As to the precise nature of the contagion, it may perhaps be urged that the large number attacked in this neighbourhood was due to some common cause like the miasm of malaria, and if there were any precedent, or *à priori* grounds, for such a supposition in the annals of dermatology it would be hard to disprove it here, for the inhabitants around the school were very widely affected. But the history of the outbreak is much more in keeping with a contagious malady, in the sense in which measles is contagious. Finally, the question may properly be asked, Is there a specific microbe present in the eruption or elsewhere? This question I have endeavoured to solve by such means as were available, and the results will be mentioned directly; but it should be specially borne in mind that the discovery of the specific microbe is not absolutely indispensable to the proof that a disease is contagious, else small-pox, which has been known to be contagious since the days of Boehaave (1730), would not be so regarded even in the present day. Small-pox, scarlet fever, measles, and other infectious diseases have been proved to be infectious even without the constant presence of a specific microbe being demonstrated. The reproduction of these diseases in animals by bacteria, and then finally obtaining cultures again from the second case, which are Koch's tests of the organism in question being the specific microbe of a disease, has never even yet been accomplished.

BACTERIOLOGICAL EXAMINATION.

A.—METHODS.

I made a bacteriological examination of Cases 1, 9, 10, 12, and 22. In collecting the scrapings of epidermal scales the patch was first wiped with alcohol, then scraped with a sterilised knife on to a clean sterilised glass slide, covered with another sterilised glass, and sealed with gutta-percha tissue and chloroform. These formed the material for examination. In only one case was there any formation of a scab (Case 1).

1. *Method for direct staining of scrapings of the epidermal scales.*—The method employed for colouration was the eosine-gentian method, which is as follows. (1) After being imbedded in celloidin, sections, which must have been cut very thin, are placed in water just long enough to remove the alcohol in which they have been lying, and then placed on the glass slide; (2) cover the section with 1 per cent. aqueous solution of eosine for from one to fifteen minutes—usually one and a half or two minutes are long enough; (3) wash in water; (4) cover the section with anilin-gentian solution (Unna) for five minutes; (5) wash in water; (6) cover the section with iodide solution for one or two minutes; (7) dry the section by means of blotting-paper; (8) clear the section with anilin oil until all excess of colouring has been removed, or picrin-anilin if necessary; (9) wash in xylol; (10) mount in xylol balsam.

Note.—To make anilin-gentian solution (4) take water with enough anilin oil in it to make a milky suspension when shaken; filter this mixture through previously moistened filtering paper. Filter the concentrated gentian-violet solution in the same way, and mix equal parts of the anilin and gentian solutions. For the iodide solution (6) dissolve a small lump of iodide of potassium in a small dish; when well dissolved add peroxide of hydrogen by drops until a deep lemon-yellow colour appears. Keep this mixture well covered all the time. Both of these solutions (4 and 5) should be made fresh for use, as they spoil very quickly. If pure anilin oil (8) does not decolourise sufficiently, then add to the oil a small portion of picrin. Heating the slide gently over the flame, section upwards, helps the action of the reagents materially.

2. *The methods for obtaining cultures from scrapings* were the ordinary ones, using 15 per cent. gelatin kept in an oven at 22° C., and agar cultures in an oven at blood-heat (37° C.). On several occasions I took down culture tubes and obtained scales direct from the patient.

B.—RESULT OF DIRECT STAININGS OF SCALES.

In three of the five cases I could detect no microbes in the scales examined. In the other two (Case 1, from patch over ear two weeks old, which was inclined to exude, and another case, an ordinary patch about one month old) there were plenty of cocci. Only one kind of coccus, however, was in large numbers. It was rather ovoid in shape, measuring about 1 μ in length and a little less in breadth. The cocci were arranged mostly in pairs, some so close together as to appear like a single coccus without very close inspection. Many of these were arranged in clumps, suggestive of the morrococcus of Unna; but on submitting specimens from these two cases to Professor Unna in Hamburg he very kindly had sections made and expressed the opinion that, though "there were a great many cocci present, he believed one sort only was in great numbers and characteristic groups, but not characteristic enough in shape and grouping to recognise them as a coccus known to him—as, for instance, staphylococcus, morrococcus, &c." The other microbes present were for the most part smaller than the prevailing organism, and a few were arranged in chains. No cultures, spores, or mycelium of trichophyton tonsurans could be obtained from any of these or other cases which I examined in the usual way for this purpose.

C.—CULTURE EXPERIMENTS.

Case 1 (June 15th).—Scrapings from patches on the cheek about two or three weeks old were tried on agar tubes, but no cultures obtained. The dried vesicle from the corner of the mouth gave gelatin cultures resembling in all respects (macro- and micro-scopically) staphylococcus albus and aureus, which liquefied gelatin by the fifth or sixth day. There was also a more slowly growing white organism which did not seem to liquefy gelatin, but which I was unable with the resources then at my command to separate from the staphylococci.

Case 9 (June 16th).—Scrapings from a patch about two or three weeks old gave white cultures growing on the surface, liquefying gelatin, and precisely resembling staphylococcus albus; but here again there seemed to be a slower-growing organism, apparently not liquefying gelatin. It would not grow on agar, but after some trouble I succeeded in isolating it in a gelatin plate culture, and then obtained *three* white surface cultures with a more or less crenated border of slow growth. Microscopically these cocci were mostly in pairs, measured nearly 1 μ, and were grouped into clumps, irregular both in size and shape.

Case 10 (June 18th).—Scrapings from a patch five or six days old gave no cultures on agar. On gelatin tiny circular white growths appeared on the surface in the course of five days. Three days later some few had begun to liquefy; others had not. They were separated by plate cultures. The former gave growths resembling staphylococcus albus. The latter appeared on surface gelatin cultures as very small white colonies, taking five or six days to become apparent with a lens and not liquefying gelatin. Microscopically the cocci were mostly in pairs, some of them single, measuring nearly 1 μ, and grouped into clumps of irregular size and shape. Gelatine stab sub-cultures of this organism showed no result at all, nor was I able to observe any result on surface gelatin cultures. But I did not look as carefully as in Case 12, about to be mentioned.

Case 12 (June 18th).—Scrapings from two patches one month and one week old respectively (which became inadvertently mixed) gave on agar in the course of seven days three distinct kinds of cultures—viz., (1) a thick, circular orange-growth, liquefying gelatin and having all the characters of staphylococcus aureus; (2) a thick, white

growth liquefying gelatin, and having all the characters of staphylococcus albus; and (3) an exceedingly thin white surface culture with raised crenated border. All these three grew side by side on the agar, but the last-named was of very much slower growth than the others and sub-cultures did not liquefy 15 per cent. gelatin tubes kept at 22° C. for two to three months. Cultures of this organism grew better on gelatin, though they were very slow on both agar and gelatin. They consisted of a very thin culture, hardly more than an opalescence (seen by a strong lens to consist of myriads of pin-point colonies), and surrounded by a thicker, white, crenate, spreading border. In the course of two or three weeks, when growth came to a standstill, the culture itself became iridescent, and the entire surface of the gelatin became covered with a faint iridescence. In gelatin plate cultures pin-point colonies, invisible to the naked eye, could be observed with a strong lens in the course of five or six days, both in the depth and on the surface (a trifle larger), which hardly grew any larger after being placed for several weeks in the oven at 22° C. Microscopically colonies of this organism when mature consisted of roundish cocci measuring a trifle over 1 μ single, but more often in pairs, and sometimes arranged in irregular masses. These cocci were larger and more separate than staphylococcus aureus and albus.

Case 13.—An agar stab culture was made from scrapings taken from the patch on the leg about two weeks old. No growth whatever could be observed for nineteen days, and then a few minute colonies were seen, from which surface cultures on gelatin were obtainable. These resembled No. 3 in Case 12, but were even of slower growth and less vitality than they.

Conclusions.—The resources at my command were not great, and only provisional conclusions can be drawn from these experiments; but it seems probable from the examination of these five typical cases that there was a microbe constantly present in cultures from all of them having the characters described above (No. 3, Case 12)—a slowly growing aerobic organism of low vitality, easily stifled by the staphylococcus when that is present, with but little liking for agar, not deliquescing 15 per cent. gelatin, and with colonies so minute as to be easily overlooked when not plentiful. The cultures of this organism differed from the microbe found in the epidemic skin disease in being much thinner, scarcely more than an opalesence, having a raised crenated border, and in the colonies being often so minute as to escape naked-eye examination altogether. The two resemble each other in not liquefying gelatin and in being easily obscured by staphylococci when these are present.

TREATMENT.

The cases, when treated, readily yielded to a mild creolin or mercurial ointment, if properly applied, in the course of a week. A patch if left alone usually subsided spontaneously in four or five weeks, but others would generally appear in succession on the same child for perhaps two or three months.

REMARKS.

1. Though the disease might by some be thought to be trivial, it has interested me a great deal. One may sometimes learn a good deal from small things, and the epidemic was sufficiently marked to lead to trouble and subsequent inquiry. It is true that the disease is not a very serious one; this is the fundamental distinction between it and the epidemic skin disease. But was it so very much less fatal and inconvenient than many other skin maladies? The patches were sore, unsightly, mistaken for ringworm, and certainly contagious, and therefore the eruption undoubtedly merits the special attention of those connected with schools, or who have to do with children.

2. The disease considered above consists of a dry catarrhal process of the skin having all the superficial characters of a dry eczema, but presenting nevertheless very well-marked clinical and etiological characters which differentiate it from that disease. One is enabled, therefore, on scientific grounds to separate it from the large general class of eczematous diseases, and to ascribe to it a contagious origin, a special seasonal prevalence, and a special age incidence. On these grounds it is worthy of nosological distinction.

3. The eruption, which has been discussed in the preceding remarks under the provisional name of "peri-oral eczema," is beyond doubt infectious under certain conditions, and is liable to epidemic prevalence. It, therefore, adds one more to the already growing list of infectious skin disorders.

Upper Berkeley-street, W.

A GROUP OF TWENTY-SEVEN ABDOMINAL OPERATIONS.

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THE twenty-seven cases, of which brief details are here given, represent the abdominal operations which I have performed during the first six weeks of the present winter session—i.e., between the dates of Oct. 4th and Nov. 15th, 1895. The variety of the cases and the peculiar features of some of them will, I hope, justify, or at least excuse, their publication. All the patients in the present group recovered from the operation. The cases may be thus divided:—Removal of ovarian tumours, 3 cases; removal of the vermiform appendix, 10 cases; resection of intestine, 2 cases; operations on the gall-bladder, 6 cases; operations on the kidney, 2 cases; operation on the spleen, 1 case; exploration of the stomach, 1 case; and exploratory incisions, 2 cases. Nineteen of the operations were carried out at the London Hospital, and 8 in private practice.

REMOVAL OF OVARIAN TUMOURS.

CASE 1.—The patient was a woman aged forty who was admitted to the London Hospital. She had had six children. The tumour had been noticed eight months previously. She had recently had pain ascribed to the twisting of the pedicle of the tumour. Some free fluid was found in the abdominal cavity. On Oct. 4th a multilocular ovarian cyst was removed. It reached to the umbilicus. One of the major cysts had burst into the abdominal cavity. There was no peritonitis and no evidence of twisting of the pedicle. The abdominal cavity was mopped out, and the wound closed without drainage. The patient made a good recovery.

CASE 2.—It is curious that in this case also a major cyst had given way. The patient, a woman aged fifty-nine, was admitted to the London Hospital. She was very corpulent and weighed 24 st. The abdomen had obtained such enormous proportions that she had been for some time bedridden. Enlargement of the abdomen had been noticed for ten years. There had been more or less constant abdominal pain for seven months. In addition to a pelvic tumour there was much ascites and a large umbilical hernia. The lower abdominal parietes was œdematous. She had chronic bronchitis. The urine was healthy. A multilocular ovarian cyst was removed on Oct. 4th. The abdomen contained many quarts of ascitic fluid mixed with glairy material, which had escaped from a cyst. The umbilical hernia, which was irreducible, was reduced from within. The abdominal cavity was flushed out with warm water from a Berkefeld filter. The wound was closed without drainage. The patient made an excellent recovery.

CASE 3.—The patient, a woman aged thirty-three, admitted to the London Hospital, is said to have had enteric fever in June and July, 1894. In August, 1894, a lump was felt above the pubes which ultimately fluctuated and was obviously an abscess. It disappeared simultaneously with a profuse discharge of pus from the bladder. The discharge of pus had continued in varying quantity ever since, with the exception of a few intervals. She had severe attacks of painful micturition, with fever and hectic symptoms. The abdomen was opened on Nov. 8th, and a small dermoid tumour of the right ovary discovered. It had become adherent to the bladder, which it had perforated. A portion of the tumour, covered with small hairs, had grown into the bladder and was removed with difficulty. The ovarian tumour was removed. The hole in the bladder admitted the forefinger readily and was situated near the base. It was closed by a series of Lembert's sutures. An iodoform gauze drain was introduced down to the bladder wound and was removed on the third day. The tumour contained much solid matter and a small quantity of hair. The main cyst had suppurated and was in communication with the bladder. The patient has done well.

Remarks.—In this and other instances in which the

bladder has been sutured I have seen no advantage from "Trendelenberg's position." The area can be well exposed by means of suitable retractors and by sponges in holders. There is no need to freshen the margin of the hole in the bladder. The sutures should be very close, should be of silk, and should go well into the muscular coat. Cleft palate needles or a curved Hagedorn's needle are the best. A catheter is used for the first three days only. With regard to the cases in which a cyst had burst into the abdominal cavity it is impossible to refrain from alluding to the surgical damage which has been wrought by the term "the toilette of the peritoneum." This mischievous expression involved a laborious cleansing of the peritoneal cavity at all costs. In the present instances the cavity should have been first well flushed out, then emptied of fluid, and then, with infinite pains, dried and wiped out by indefinite sponging. It has been made very evident that the "toilette of the peritoneum" is not a safeguard against peritonitis. An elaborate sponging so damages the peritoneal endothelium as to destroy its remarkable power of dealing with micro-organisms, and appears to favour the passage of the colon bacillus through the intestinal wall. On the other hand, normal cyst fluid is sterile and can be well disposed of by the peritoneum. In one of the cases above described the abdominal cavity was merely mopped out with gauze sponges and as much cyst fluid removed as was in evidence. In the second case the immense size of the abdomen prevented this from being done, and the cavity was flushed out. In both instances a quantity of iodoform was introduced into the abdominal cavity, and no drain was employed.

REMOVAL OF THE VERMIFORM APPENDIX.

CASES 4 to 13.—There were 10 examples of this operation—4 were performed in the hospital and 6 in private "homes." They were all carried out for relapsing perityphlitis and were performed during the quiescent period. Seven of the patients were males (aged respectively fourteen, eighteen, twenty-five, twenty-eight, thirty-two, thirty-six, and forty-two years), and 3 were females (aged fourteen, thirty-eight, and fifty-four years). The number of attacks of perityphlitis varied from 2 to 12. One patient (a woman aged thirty-eight), the number of whose attacks was not estimated, had been confined to bed for fifteen months. Her appendix contained a small fæcal concretion and much pus. In no other case was there any concretion or foreign substance. The appendix was found to contain muco-pus, or to be strictured, or to be acutely bent upon itself and much distended. In nearly all the cases there were adhesions. Some of the operations were very simple; others were difficult. In one case the appendix was adherent in the pelvis, and its removal caused great trouble. In no instance was any drain used. All the patients made excellent recoveries. It is very desirable that the acute symptoms should have entirely subsided before the operation be undertaken. If this rule be not observed many soft adhesions and much bleeding are encountered. If bleeding vessels have to be "sequestered" it is difficult to obtain a good hold for the needle. In all the cases the stump of the appendix was sequestered, and the involved peritoneum was freely dusted over with iodoform. The sequestration of a bleeding point or surface is, it is needless to say, effected by means of as many Lembert's sutures as are required to completely tuck in or turn in the involved surface. It is of infinite service when an actual pumping vessel cannot be picked up. Some surgeons have advised that the appendix be divided in a circular manner as far as regards its serous and muscular coats, and that the undivided mucous membrane be then drawn out as a separate tube and cut. There is no great object gained by this procedure, and it is very seldom possible, because one of the very earliest and very commonest of the changes depending upon mischief in the appendix is more or less destruction of the tube of mucous membrane. In many cases the whole of the mucous lining has been destroyed. I have never found a date-stone, a cherry-stone, or a grape-pip in the appendix, although I have met with fæcal concretions which have very closely resembled those objects. As a matter of fact, foreign bodies play a very insignificant part in the production of perityphlitis. I think that a ventral hernia may be expected in some 5 per cent. of these cases, but I have seen less of it since I have used a continuous silk suture for the peritoneum and have made the surface sutures (of silkworm gut) include all the soft parts external to the serous membrane.

RESECTION OF INTESTINE.

CASE 14.—A man aged twenty-one, admitted to the London Hospital, had had occasional attacks of colic with vomiting and diarrhœa for five years. The attacks had become more and more frequent, and on admission he had all the symptoms of stricture of the small intestine. Coils of hypertrophied bowel were visible. No tumour could be felt. He had lost 42lb. in weight during the last eighteen months. A median incision revealed a stricture of the ileum. The narrowed part occupied about two inches, and five inches of the bowel were removed. The divided ends were approximated by Murphy's button. The stricture would not admit the little finger except with difficulty. The bowel about the strictured part was much thickened and ulcerated. Microscopic examination showed that the stricture was due to cicatricial contraction following upon tuberculous ulceration. The tuberculous process was active in the vicinity. The operation was performed on Oct. 11th. The patient had diarrhœa for five days after the operation. He made a good recovery. At the end of five weeks he had gained 14lb. in weight, but the button had not been passed.

CASE 15.—The patient, a woman aged twenty-six, admitted to the London Hospital, is stated to have had typhoid fever some six months previously. She had been ill ever since. Her main troubles had been constantly recurring obstruction of the bowels with colic and vomiting. On admission she presented the symptoms of stricture of the colon. She was wasted, and a lump was to be felt in the left iliac fossa. The abdomen was opened in the left semilunar line on Oct. 11th. A growth was found to occupy the sigmoid flexure. The involved bowel was cut away, and the divided ends were united by the largest size of Murphy's button. The button was felt in the rectum on the eleventh day after the operation and was removed. The patient made an excellent recovery. The portion of gut removed measured 5 in. The growth which produced the stricture was shown on microscopic examination to be an epithelioma and occupied 2 in. of the bowel. One enlarged gland was discovered and removed.

Remarks.—Murphy's button is not so well suited for cases in which the difference in the lumen of the bowel above and below the stricture is considerable. Simple suturing has, on the other hand, a great tendency to lead to bending of the bowel at the suture line. In Case 15 the gut above the stricture was greatly distended, and its walls were almost as rigid as leather. The bowel below the obstruction was flaccid, narrow, and empty. The union of parts so unlike in size and density is very apt to lead to "kinking." In both these cases I supplemented the operation by a series of sutures of the bowel beyond the limits of the approximated buttons. This was necessary in order to bring about a good union of the serous surfaces and to cover in exposed mucous membrane. I have noticed that such extra sutures in the small intestine or in the procedure of gastro-enterostomy are apt to be followed by retention of the button. I have now a number of patients in whom the button has been retained for many months, and in no instance has any inconvenience followed so far. In the operations I have carried out on the colon the button has always come away. I have never found the button to become blocked up. In Case 15 a plum-stone was passed within a day or so of the operation and must have come through the button.

In a case of pelvic peritonitis of six years' standing a communication existed between the sigmoid flexure and the bladder, and both urine and fæces escaped through sinuses in the abdominal wall. After the sinuses had been dealt with surgically the case was brought to a very successful issue by resecting the whole of the sigmoid flexure. I used the largest size of Murphy's button, which came away on the eighth day. I believe this to be a very early period for the discharge of a button in the colon. In dealing with the sigmoid flexure the button can be used in cases in which, I believe, a line of sutures could not be introduced from want of space to work in. It is desirable that the buttons be tested beforehand. Now and then a button is met with possessing this defect. If the two cylinders be not exactly in line, the male segment gains on the female segment and cannot possibly be disengaged. This occurred to me recently in dealing with a case of acute intestinal obstruction due to an adherent Meckel's diverticulum. The diverticulum was gangrenous and was excised, together with a piece of the ileum. In bringing the two parts of the button together the cylinders were not in an exact line—a common possibility; the button jammed, and could neither be pressed home nor withdrawn. I had to carry out a second resection and unite the two cut ends by means of a second button.

OPERATIONS ON THE GALL-BLADDER.

CASE 16.—A woman aged thirty-seven, who was admitted

to the London Hospital, had had attacks of gall-stone colic since 1887, the more severe being attended by jaundice. The gall-bladder formed a very large movable tumour, which had been considered to be a movable kidney. It could readily be displaced so far towards the left as to receive pulsations from the aorta. On Nov. 8th the abdomen was opened in the right semi-lunar line. The gall-bladder was of great size and was distended with perfectly clear mucus. There were no adhesions. It was not possible to demonstrate whether there was or was not a stone in the cystic duct. The gall-bladder was brought to the surface and opened. The patient is doing well.

CASE 17.—A woman aged thirty-five, who was admitted to the London Hospital, had had three attacks of gall-stone colic. A hard mass could be felt in the region of the gall-bladder. The abdomen was opened over the swelling. The gall-bladder was surrounded by adhesions, and the confused swelling was brought to the parietes with difficulty. The gall-bladder was incised and was found to be full of pus and to have unusually thick walls. No stone was discovered. The patient has done well.

CASE 18.—The patient, a woman aged twenty-eight, who was admitted to the London Hospital, had been ill only six weeks. Her trouble commenced with sudden pain attended by rigors, and later by frequent and severe vomiting and great abdominal tenderness. There was no jaundice. A vague mass was to be felt near the median line and under the liver. Operation took place on Nov. 15th. The tumour proved to be a distended gall-bladder surrounded by adhesions and firmly attached to the stomach. The actual gall-bladder was demonstrated with difficulty and was ultimately brought to the surface and secured. It was opened and found to contain bile and muco-pus. A single large gall-stone was felt, which was apparently on its way to the stomach. It appeared to have entirely escaped from the gall-bladder and was surrounded by much inflammatory material. This material was so frail in places that I did not venture to dislodge the stone, which could be removed later through the fistula which was established. The patient has done well, and the stone has been removed.

CASE 19.—A woman aged forty-five who was admitted to the London Hospital, had had attacks of gall-stone colic for many years. She had been jaundiced for the last eight weeks. On Nov. 8th the abdomen was opened in the right semi-lunar line, and twenty-three stones were removed from the gall-bladder, which was fixed to the wound as usual. The patient has done well.

CASE 20.—A man aged twenty-nine had been liable to severe attacks of abdominal pain for some two years. He had also had an attack of undoubted peritonitis. There had been no jaundice. No definite swelling could be felt. On Oct. 21st, 1895, a median incision was made which revealed some unexplained adhesions about the head of the pancreas and a resulting confusion in the anatomy of the part. Stones could be felt in the gall-bladder, which was but little enlarged. The gall-bladder was brought out through a wound in the right semi-lunar line, was fixed, and was opened five days later. About 150 small stones were removed. The fistula soon closed, and both wounds are now soundly healed and the patient is well.

CASE 21.—In this case, that of a woman aged forty-seven who was admitted to the London Hospital, I had removed in 1893 seventy-two stones from an enormously distended gall-bladder which contained three pints of pus. Lately she had had occasional attacks of colic and of tenderness about the site of the old wound, which was firmly healed. I opened the abdomen near to the old scar on Oct. 4th. The gall-bladder was represented by a shrunken, fibrous mass. There was no suspicion of any gall-stone. The hepatic flexure of the colon was very adherent to the old gall-bladder, and was somewhat sharply bent. This kinking of the bowel appeared to be the cause of the attacks of pain. It was set free, and the patient made a good recovery.

Remarks.—Some of the above cases have yet to be completed. The immediate safety of the patient is without doubt more certainly secured if the evacuation of the gall-bladder can be effected in two stages. This procedure, however, does not permit of the most ready extraction of the stones. It is possible, I think, to err in the direction of attempting to remove all the stones at one sitting at almost any cost. The breaking up of a stone by forceps applied to the outer side of the duct, the "needling" of an impacted stone, and the persistent attempts to remove such a stone through the hole made in the gall-bladder are all measures which are apt to lead to disaster. The determined attempt to make the operation at once complete may sacrifice the patient's life. I have seen little harm from leaving the impacted stone when it is in the cystic duct or in a mass of soft adhesions outside the gall-bladder. Nearly always it can be removed at a later period or is spontaneously expelled. When the gall-bladder has suppurated the subsequent freeing of the impacted stone is almost invariable. When the stone is lodged in the common duct the position is of course less simple, as the retention of the stone involves a complete biliary fistula. In the only case (Case 19) in the above series associated with jaundice I was careful to remove all the stones at one sitting.

OPERATIONS ON THE KIDNEY.

CASE 22. *Hydronephrosis.*—The patient, a woman aged forty-seven, was admitted to the London Hospital with a very large renal swelling on the right side. She had complained of pain in the pelvis and abdomen as long ago as last August. Subsequently to that she had noticed an increasing swelling in the right loin. The uterus was absolutely fixed. There was dysuria. The renal tumour reached to Poupart's ligament. On Nov. 15th the abdomen was opened by a median incision. The peritoneum was found to be dotted with nodules of a growth (proved microscopically to be carcinomatous). There was a malignant growth (of uncertain origin) in the pelvis, which had fixed the uterus, ovaries, and bladder, and had obliterated their anatomical details. The kidney exhibited the condition of hydronephrosis. The cyst was of great size; the wall was very thin, and the contents were quite clear. The peritoneum was stripped off, the renal artery, then the veins, and lastly the ureter being ligatured. The cyst was then removed and the abdominal wound closed. The hydronephrosis would appear to have depended upon a blocking of the ureter by a growth in the pelvis, and to have therefore been of very rapid formation. Not a trace of kidney tissue had survived. As in other cases of removal of the kidney, I applied separate ligatures to the artery, the veins, and the ureter. The patient has made a good recovery from the operation.

CASE 23. *Movable kidney.*—The patient, a woman aged thirty-three, very neurotic, was suffering severely from symptoms depending upon the extreme mobility of the right kidney. The kidney was exposed from the loin and was fixed by three sutures. The operation was performed on Oct. 31st. The patient made a good recovery and was freed from all her renal symptoms.

Remarks.—The trouble caused by a movable kidney varies greatly. In many instances the loose organ is discovered by accident, and the patient is totally unconscious of it. The appearance of symptoms depends mainly upon two factors: (1) the pedicle of the kidney may become twisted and intense pain be at once produced; and (2) the neurotic state of the patient is the predominant feature of the case, and the movable kidney is a mere focus. The latter circumstance is the commoner of the two. I have thought in some cases that a movable kidney has interfered with the action of the colon and has favoured the collection of scybalous masses. I have seen a normal kidney worked out of its place by a vigorous masseuse, who considered it to be a fæcal mass, and who did her best to force it along the transverse colon. In a few instances the troubles caused by a movable kidney have been overcome by a special truss, but the cases are few and the difficulties in the way of fitting the instrument are numerous. I have sutured the kidney in some fifty instances and believe the operation to be fairly successful. It is attended with very little risk. One suture is, I think, useless and very apt to lead to a relapse. I introduce two sutures as far apart as possible, and very often insert three. The sutures, which are of silk, pass into the actual substance of the kidney. The surgeon is often deceived upon this point, and the needle, which is supposed to have penetrated the gland, often passes quite clear of it. A circular Hagedorn's needle answers well, or a modified form of what is known as "Prothero Smith's perineal needle." The sutures should be drawn tight, but not as tight as possible. "Kidney pain" in the outer side of the thigh and in the heel is not uncommon after the operation and may be long-abiding. The chief complication after the operation comes through the bladder in the form of retention, catheterisation, and possibly a troublesome cystitis. The fixing of movable organs by suture may be said to be, on the whole, successful. In a case of "dropping" of the liver in Glénard's disease I have replaced the organ and have secured

it in position by sutures, with the result that an examination made of the patient some months after the operation showed the liver still to be securely fixed in the position in which it had been sutured.

OPERATION ON THE SPLEEN.

CASE 24.—The patient, a delicate woman aged thirty, had been in ill health for two years. She had been liable to attacks of constipation and vomiting. Two months previously an enlargement of the spleen was noticed, and this was attended with intermittent pyrexia. The patient had never lived out of England or in a malarious district. When seen she was exceedingly ill and too feeble to raise herself in bed. She had the appearance of a subject of advanced hectic fever. She was pregnant. There was a fluctuating swelling—evidently an abscess—in the splenic region. An incision was made over this, and an abscess of the spleen discovered and opened. Six ounces of foul pus escaped as well as much broken-down splenic tissue. The finger could be passed as far as it could reach into the spleen. The operation was performed on Oct. 25th. The splenic cavity was drained with gauze. Two days after the operation the patient gave birth to a seven months' fœtus. She improved remarkably, and the temperature became normal. Three weeks after the operation, without further complication, the discharge from the wound became feculent, and this condition still existed when the patient left the hospital.

EXPLORATION OF THE STOMACH.

CASE 25.—A man aged forty, who was admitted to the London Hospital, had been ill—according to his own report—for twelve years with pain in the stomach and vomiting. He had vomited blood. He was greatly emaciated. The pain in the stomach was evidently very severe. The stomach was exposed by operation on Oct. 11th. It was much enlarged, but exhibited no abnormal appearance beyond this. The stomach was then opened and emptied. The pylorus was examined from within and every part of the gastric surface explored. No ulcer or other morbid condition was discovered. The gastric and abdominal wounds were closed. The patient recovered well, and all pain in the stomach has now practically disappeared.

EXPLORATORY INCISIONS.

CASES 26 AND 27.—These cases were both treated in the London Hospital. The first was a case of abdominal tumour in a man aged forty-six who had had abdominal pain, enteritis, and gastric troubles for nearly twelve months. The tumour was on the left side and had attained but small dimensions. Operation proved it to be a retro-peritoneal sarcoma behind the descending colon. This and other cases draw attention to the frequency with which retro-peritoneal sarcomata are found in men about middle life, and upon the left side. The first signs are nearly always a failing of energy and a sense of increasing weakness. The patient recovered well from the operation, and if the experience of like cases is of any value the mass will shrink for a while, or at least cease to grow for a period. The operation was performed on Oct. 11th. The second case was that of a man aged fifty-nine, who had ascites associated with symptoms which strongly suggested some stenosis of the bowel. On Nov. 1st an exploratory incision was made, which showed that the ascites was due to cirrhosis of the liver. There was no other sign of disease except a contracted meso-sigmoid colon, such as appears to be often the cause (or the effect) of troublesome constipation.

Wimpole-street, W.

NOTE ON DR. HINSHELWOOD'S COMMUNICATION ON WORD-BLINDNESS AND VISUAL MEMORY.[1]

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DR. HINSHELWOOD may be right in stating that "Kussmaul first clearly pointed out that blindness for words is capable of being met with clinically as an isolated condition." The article in Ziemssen, however, to which he refers was not the first in which attention was called to this remarkable condition. A case is reported in the course of an article on the Cerebral Mechanism of Speech and Thought[2] which exemplifies it perfectly. The summary of the case only need be quoted: "After an acute cerebral attack absolute inability to read printed or written words (except own name) while the patient wrote correctly from dictation and composed and wrote letters with a little prompting"—which, as stated in the text, he could not himself read afterwards. The condition was not named "word-blindness," and, in my judgment, the employment of this term has been misleading and unfortunate. In the case observed in 1871 and read before the Royal Medical and Chirurgical Society in February, 1872, the blindness for words was a part of a much larger defect, a complete loss of the faculty of naming an object at sight, and it is in order to point out this that the present note is written. The heading of the case may now be completed: "Inability to recall the name of the most familiar object presented to his sight, while he conversed intelligently, employing an extensive and varied vocabulary, making few mistakes, but occasionally forgetting names of streets, persons, and objects." Whenever word-blindness, so-called, has come under my notice since that time it has always been associated with inability to name an object presented to the vision; if a man cannot name a watch, *a fortiori* he cannot name a word. The path from the "visual perceptive centre" to the "naming centre" has been cut.[3] Case 9 of the same communication to the Royal Medical and Chirurgical Society was believed to exemplify interruption of the path between the auditory perceptive centre and the "naming centre" (word-deafness), and in a later communication[4] is related a case illustrating damage of the "naming centre" itself, a cortical area upon which, as I suppose, converge perceptions from all the perceptive centres of sight, hearing, touch, smell, and taste, for combination into a complete idea of any external object, the auditory contribution being the name. Attention may, perhaps, specially be called to two cases,[5] one with post-mortem examination, in which a clinical distinction was made between the sensory and motor parts of speech. A noun-substantive is the highest representative of the sensory aspect of language; all the other parts of speech are employed to set nouns in motion, so to speak, and are motor. In the cases alluded to the patients could say anything except nouns.

A remarkable feature in Dr. Hinshelwood's case is that the patient could read figures. In several of my illustrations of aphasia it has been pointed out that the patient could say and write figures, could tell the number of coins shown to him, and could count up to and beyond twenty, while he could not say the alphabet. Now the idea of number is an intellectual abstraction, and both in its conception (sensory) and in its expression (motor) it would seem that different sets of cells and fibres must be employed on a higher plane than, for example, the auditory cell groups which educate the vocalising cell groups.

Brook-street, W.

[1] THE LANCET, Dec. 21st, 1895.

[2] Transactions of the Royal Medical and Chirurgical Society, vol. lv., 1872, p. 162.

[3] In the numerous published cases which I have read I do not remember to have seen that the test of asking the patient to name objects has been tried.

[4] Transactions of the Royal Medical and Chirurgical Society, vol. lxi., 1878, p. 147.

[5] Ibid., vol. lxvii., 1884.

A CONTRIBUTION TO THE STUDY OF SOME FORMS OF ALBUMINURIA ASSOCIATED WITH KIDNEY TENSION AND THEIR TREATMENT.

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I THINK the assertion may be made that if certain organs of the body occupied other positions than those where nature has placed them a variety of morbid conditions to which they are respectively liable would now receive somewhat different treatment from that which has hitherto been adopted. This is a consideration which naturally presents itself to us with greater force at the present time, when by the aid of antiseptic surgery all parts of the body are being

brought within reach of surgical exploration and treatment with a degree of certainty and safety far beyond what the most sanguine could ever have anticipated. The most recent advances of this kind are illustrated by what has been done in the case of the brain and spinal cord.

Of other complex organs probably the eye furnishes us with the best example of what surgery is able to accomplish in removing obstacles and impediments to vision and in combating the disastrous effects of intra-ocular tension and the degenerations arising therefrom. For these advances are we not in a measure indebted to the accessibility of this organ both so far as relates to inspection and treatment?

Amongst other organs of the body the kidneys furnish us with examples of the most complex and delicate forms of structural development, as we might expect, considering the elaborate kind of excretion in which they are engaged. Like the eyes they are double organs, with sympathies existing between them by which impressions and actions are reflected from the one to the other. Relief afforded to one kidney, for instance, usually assists the other, whilst when the excretory power on one side is suspended or arrested the opposite organ speedily takes up the whole of this work. The surgery of the kidney, even in its present stage, may be regarded as one of the most important advances of the present century. What has been done for renal stone, growth, distensions with pus and urine, abnormal mobility, and other painful affections of this part is sufficient to indicate this. Nor is it at all likely that we have here reached limits which cannot be extended with advantage. I allude more particularly to the effects of tension arising out of excessive excretory efforts on the part of these organs and resulting in congestion and inflammation, which, in some instances, are probably more disastrous and far-reaching in their local consequences than those surgical conditions of the kidney which have been briefly noted.

I have referred to the eye as illustrating what surgery has accomplished in reference to tension and certain ill-effects arising out of it. Here one of the most disastrous effects of pressure is seen in that condition to which the term "glaucoma" is applied. The recognition of the true pathology of this affection and the adoption of mechanical treatment by iridectomy or an allied operation for its relief at once resulted in the saving of a vast number of eyes which previously to this discovery would have been lost.

I purpose considering in this paper some points connected with tension of the kidney relative to albuminuria and its treatment by surgical means. In the first place I would draw attention very briefly to the structural arrangement of the kidney. It may be said to be a highly organised gland surrounded by a thin, though fibrous, capsule, and divided up into departments or sections by barriers of a similar tissue. It is capable of distension to almost any degree by a gradual force acting from within, as, for instance, the retrograde pressure proceeding from strictures which oppose the escape of its excretion, but from the nature of its structural constituents is incapable of adapting itself to sudden emergencies of this kind. Before proceeding to notice some results which have followed certain operations I have practised upon the kidney, and the deductions which these seemed to warrant, there are two questions I should like to raise. In the first place, is there evidence to warrant a conclusion that the exudation of albumin by the kidneys is the result of structural damage directly occasioned, as might occur as the result of nephritis or renal congestion? And, in the second place, are the degenerative changes subsequently noticed in the chronic forms of these affections consequent upon the damage thus inflicted on the organ?

Possibly my surgical experience has led me to exaggerate the disastrous effects of tension on the tissues of the body, though for the most part it has been gained in regions which may be said to be less highly organised and less delicate than the excreting apparatus of the kidney. It certainly seems somewhat remarkable at the present day that so many different views exist, or have been put forward, explanatory of the process by which albumin exudes so as to form a variable part of the urinary excretion. These various theories I shall not attempt to discuss in detail or to reconcile. That albumin is frequently found in the urine under conditions necessitating high vascular tension, and where the excretory strain on the organ is considerable, as in the acute form of scarlatinal nephritis, cannot, I think, be denied. Referring to the latter point, Sir T. Grainger Stewart observes:[1]

"Albuminuria is very often due to changes of an inflammatory character in the epithelium of the tubules and in the stroma of the organ, and in a very large proportion of the cases in which it occurs in practice it is dependent upon this cause." That the changes which take place as a consequence of nephritis by the substitution of a lower for a higher excretory tissue, as we see in the cirrhosed forms of Bright's disease, are due to the damage the organs received in the active and initial stage of congestion seems by no means improbable. Sir Thomas Watson in his Lectures observed that "the stress or congestion which befalls the kidney in cases of febrile anasarca may set on foot a morbid process that long works silently and unobserved, but at last declares its operation by symptoms." We may perhaps argue that by the organisation of the products of inflammation and congestion, and by the repairs the latter may render necessary, an explanation may be found for some of the structural changes observed in connexion with certain chronic forms of nephritis. Nor can the fact be entirely discarded in connexion with this subject that the medicinal treatment of albuminuria, so far as relates to the altered state of the urine, cannot be regarded as entirely satisfactory or progressive. Commenting upon this point, Sir T. Grainger Stewart observes: "Sir William Roberts and Professor Rosenstein have come to the same general conclusion as Dr. Saundby as regards the inefficacy of drugs in diminishing albuminuria, and I have satisfied myself by a long series of careful observations that we have no right to credit any drug with the power of directly diminishing the discharge of albumin."

I will now proceed to the more practical part of the subject. This, though of a somewhat fragmentary character, presents points of interest which seem worthy of consideration, if not of further application.

Since the introduction of the more general adoption of direct exploration of the kidney through an incision from the loin or otherwise a certain proportion of cases have been met with where it failed to reveal any obvious cause for the symptom or symptoms which led to the adoption of the proceeding. It has, however, been frequently noticed that such cases were often completely and permanently cured by what was done. Amongst others Professor Annandale was one of the first to draw attention to this fact. A few examples of this kind, occurring at varying intervals during a somewhat lengthened experience of my own, have led me to believe that there may be other explanations for this than those hitherto offered. I regret that only scanty notes were kept at the time of some of my cases, arising from the fact that, in the absence of what was sought for, the existing conditions were insufficiently appreciated, whilst the results appeared either unexplainable or were referred to local states, such as the accidental fixation of a loose kidney, the division of a disordered nerve, or the moral effects of an operation. Further, I have frequently drawn attention at the time of exploration to the varying states as to tension the kidney presented in different individuals. In one case it would resemble that of a ripe plum, whilst in another the organ was flaccid and unresisting on pressure with the finger. Yet these differences were not always explainable.

In the early days of renal surgery I cut down on the kidney from the loin in a youth aged eighteen, expecting to find a suppuration either within or around the organ. The patient was suspected to have had scarlet fever three weeks before this was done and had since suffered from intense lumbar pain. He had had a slight rash, some desquamation, a sore throat, and albuminous urine with casts. I undertook the operation with some hesitation and limited my incision so as just to enable me to put my finger on the kidney. It felt so tense that I extended my incision and opened it with confidence, expecting to find matter. This was not the case, and I closed the wound with the feeling that I had made an error in diagnosis. There was a full discharge of blood and urine from the wound for some days. The latter was lightly plugged with lint and in the course of ten days or so healed soundly. After the incision was made the excretion of urine became far more abundant, and the albumin gradually and completely disappeared.

In 1887 I operated upon a man aged fifty years, who by nature of his occupation spent a large amount of his time underground. Occasionally he suffered from hæmaturia in conjunction with colicky pains about the groins, and I came to the conclusion that he was suffering from renal calculus. As, however, the symptoms were neither urgent nor confined to one kidney the consideration of operation was postponed. In the course of a few months after I first saw him,

[1] Lectures on Albuminuria, 1888.

and whilst he was continuing his work underground, the urine became largely and constantly albuminous and there was some pain referred to the right loin. I took him into the Royal Infirmary at Liverpool, where I was residing, and explored the right kidney. The organ was found to be enlarged and tense. An incision of an inch in length was made through the cortex, and the pelvis was explored with the finger, but after careful examination no stone could be found. There was a considerable discharge of blood and urine, which continued for a fortnight or so, a drainage-tube being retained in the wound; on the withdrawal of the latter healing followed and the urine became quite normal. I heard some time afterwards that the patient remained in excellent health and was able to resume his ordinary occupation.

The only other case I shall refer to is one that came under my observation in 1893. It was that of a woman aged forty-four years, who had suffered from slight hæmaturia at times for a year previously; occasionally the urine was albuminous. Shortly after I saw her she had a severe attack of influenza, which was followed by an aggravation of her renal symptoms. She complained of pain on pressure over the left kidney, and the albumin not only increased in quantity but was constantly present in the urine. As she believed she had passed a small calculus some months previously I thought it a proper case for exploration, and this was accordingly made. The late Mr. Durham saw the patient in consultation with me. The left kidney was found to be swollen and very tense. It was opened and explored with the finger, but no calculus could be discovered. There was a free drain of urine with some blood, which continued for about a fortnight, when the wound closed. The patient is now quite well and the urine normal.

Looking at the three cases I have briefly related, I believe that the first was scarlatinal nephritis, the second nephritis from exposure to cold and damp, and the last subacute nephritis following most probably upon influenza. Amongst other features each case was characterised by the presence of albumin in the urine, which I am inclined to attribute to inflammation or its immediate effects. We do not, I think, sufficiently recognise the intense degree of vascular and tubular infarction that attends some grades of nephritis. Some years ago I saw a girl aged seven years who was suffering from scarlet fever of a malignant type. Almost complete suppression of urine was the leading feature in the case, and death took place in four days from the commencement of the illness. At the necropsy the kidneys were found to be so highly congested that I was not surprised at their being unable to excrete. I remember the passing impression arising in my mind that an incision into them appeared to be the only means that might have been effectual in restoring their function. In a recent paper on Scarlatinal Nephritis and its Varieties Dr. Meadows Turner[2] remarks: "Out of the 5109 cases fifty-five died with nephritis either alone or complicated with other lesions. This number includes those who presented some symptoms during life, as well as some others in whom post mortem extensive disorganisation of the kidney was found, though during life there were no sufficient symptoms for diagnosing such a complication."

That inflammation attended with exudation, but not necessarily with suppuration, is sufficient to destroy the functional power of an organ is evidenced in the case of the testes, where ability to procreate is sometimes lost by synchronous or successive attacks of epididymitis on the two sides. The late Mr. Henry Smith, in connexion with this subject, not only showed that the progress of this disease might be curtailed and pain removed, but that the function of the organ might be preserved by a limited division of the investing tunic. In this way, he urged, the disastrous effects of tension on the organ might be averted. I have frequently availed myself of this practice with advantage.

A few words may be added as to the nature of the operation which might be appropriate in cases of suspected kidney tension and as to the time and occasion of its application. It may be briefly stated as being that usually adopted for the exploration of the kidney with the finger by means of a small transverse lumbar incision. The surgeon will then be able to judge from the feel of the organ as to whether it is desirable to open it. If the indications are not clear the wound on being closed by sutures usually heals by first intention. At all events, no risk is incurred. In the second place, the operation should, of course, be reserved for cases where there is evidence that the recuperative power of kidneys suffering from nephritis is overweighted. Where after an attack of this kind the albumin is not disappearing from the urine, and there is a prospect, unless some relief is found, of permanently damaged kidneys resulting, then a trial of this expedient may be undertaken without adding to the gravity of the circumstances. In what time all traces of a nephritis, either acute or subacute, should have disappeared from the urine before the surgeon is called in is rather a point for the physician to determine. That many cases of nephritis with high tension and subsequent structural deterioration must necessarily be attended with cardiac hypertrophy or enlarged powers of circulation is at once obvious. Diminished capacity to excrete can only be compensated for by increase in the rapidity of the blood current. In the restoration of function we have the only safeguard against the development of this complication.

Lower Berkeley-street, W.

[2] Guy's Hospital Reports, 1894.

THE OPERATIVE TREATMENT OF CLEFT PALATE.[1]

[WITH COLOURED ILLUSTRATION.]

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IT would, I think, be out of place if I made this the occasion of entering into a detailed account of the methods adopted in dealing with the cleft palates of the children whose brief clinical records form the basis of this paper. To do so would be to levy an unfair tax upon time and patience, and, possibly, to deprive me of the opportunity of making remarks upon the operation which might be more generally of interest. The five cases which form the basis of this paper happened to come under notice in my private work during the months of May, June, and July last. In most of them the cleft traversed the hard as well as the soft palate, and they were all dealt with on very much the same plan. In each case Mr. Henry Davis gave chloroform as the anæsthetic, partly by a flannel mask and partly by a Junker apparatus, and Mr. Kellock kindly helped me with the operation. Smith's gag was used, and the child's head was allowed to hang well back over the end of the table so that the blood might make its escape by the nostrils instead of entering the pharynx or larynx. All the children were operated on at the St. Helena Home, next door to Lord's cricket ground, which has the great advantage of being surrounded by a large garden which in some respects answers Bacon's demands as to what a garden should be. He says: "For the side grounds you are to fill them with variety of alleys, private, to give a full shade; some of them wheresoever the sun be. You are to frame some of them likewise for shelter, that, when the wind blows sharp, you may walk as in a gallery." And, surely, in such an environment as this, primary union is more likely to be obtained than when a child after the operation is shut up in a close ward or a stuffy house. I got the children out into this garden, if possible, on the day after the operation, and they amused themselves on the grass quietly and safely the livelong day. Such an arrangement could be carried out only in the spring and summer, and my experience is that this is by far the best time for operating. East winds, fogs, catarrhs, coughs and colds have then passed away, and, moreover, a good natural light can almost be depended upon for the operation.

When the question of operating upon a cleft palate is being considered, due regard should be paid to the aspect of the child, and careful inquiry should be made as regards the general state of health. The same precautions are, of course, advisable in the case of every operation in which, urgency being out of the question, the surgeon can choose his own time and place. But in the case of operations for cleft palate there is this difference, that if primary union is not secured complete failure is likely to result. If the edges of the palatine cleft do not adhere from the first, the child's

[1] A paper read at a meeting of the Medical Society of London Nov. 25th, 1895.

TO ILLUSTRATE MR. OWEN'S PAPER ON CLEFT PALATE.

CLEFT OF HARD AND SOFT PALATE.
With view of Enlarged Pharyngeal Tonsil (Adenoids).

tongue and his food find their way between them, and inflammation, ulceration, and suppuration ensue; the stitches cut their way out or adhere uselessly to one side, and the child's mouth is probably left in a worse state than it was before, because the borders of the cleft are henceforward to be represented by firm and unpromising scar tissue. Failure to secure primary union after this operation is far more serious than it is, for example, in the case of the radical treatment of hernia or in the case of a harelip. In the former instance suppuration, though greatly to be regretted, does, as a rule, little more than delay the healing of the wound; and in the case of the harelip, as soon as the inflammatory swelling has subsided, the granulating margins of the labial flaps can be brought together and a secondary union promoted which, in all probability, effects in due course a most excellent result. For a cleft palate operation, then, the child must be in the very pink of condition, and the surroundings should be such that nothing is likely to disturb him. With the object of getting the child to adapt himself to the environment, it is well to have him placed in the charge and under the authority of the trained nurses for a few days before being operated on. Some children learn their first lessons in obedience in these circumstances.

We do not yet understand how it is that there should be an element of uncertainty in the results of operations for cleft palate. I suppose that my experience is not peculiar in this, that on completing a long, difficult, and unpromising operation, when I have remarked that I must not be too hopeful as to the result, the issue has been perfect; and, on the other hand, when I have prophesied a success for an unusually easy case, Nemesis, the daughter of Nox, has apparently overheard, and has condignly punished me. As to what may be the exact source of the micro-organisms which every now and then undergo successful incubation in the area of the operation, and thereby spoil the surgeon's work, I can say nothing definitely—I suppose that they are staphylococci and streptococci. The operator, however, should take care that he does not introduce any of them with his instruments or sutures, and with this object in view he must have all his material boiled just before using it. And although the delicate mucous membrane of the mouth does not allow of his using the customary carbolic lotion, yet at least he can take good care to have the child's mouth and his own fingers as aseptic as he can possibly get them. As regards the child's mouth, there is much that he can do. Enlarged tonsils and adenoids should be got rid of some weeks beforehand, and carious teeth extracted or efficiently dealt with in other ways. And if just before the day has arrived the tongue be found coated or the breath foul, or if the child be vomiting, purged, or coughing, or the temperature be raised, the operation must be postponed.

It has been remarked that, as regards the healing of wounds, the mouth may be left to take care of itself; and, for the most part, this is true. Taking into account the work of the dental surgeon, there is no region of the body in which so many wounds are daily inflicted as the mouth; and, with all this, how rarely does one hear of either constitutional or local trouble being caused by wounds in the mouth. They all heal quietly, though, for the most part, by granulation; but something better than this is needed after operating on a cleft palate. Not only must the child and the child's mouth be wholesome before the operation is undertaken, but the surroundings must also be favourable. Mischief-seeking germs want no better nidus than that afforded by the muco-periosteal flaps which have necessarily been injured by the operation on the palate. There they find moisture, warmth, and oxygen. No incubator could afford them a more generous or favourable treatment. If there happen to be such germs floating in the air the wound is more than likely to attract them, and when once there they cannot be dislodged or even controlled. It is well, therefore, as I have already insisted, that the operation should be done in an atmosphere which is as free, fresh, and favouring as possible. I am anxious to hear the opinions of other surgeons in this matter, but my own experience is that cleft palate operations turn out much better in private practice than in hospitals. In hospital work some cases do perfectly well, and then come a series of disappointments, partial or complete. Yet, so far as the surgeon could tell, the one set of cases resembled the others as nearly as, in clinical work, balance and average are obtainable. I think it is a good plan for the surgeon to keep out of sight upon the day of the operation, so that when he subsequently appears upon the scene he may be regarded as a kind and sympathetic friend. In this way he gains the child's confidence and the privilege of looking at the palate whenever he wishes. Not that inspection can do any good. Though, on the other hand, if the child does not object, it can do no harm. As regards the operation in these children, it was begun by paring a slender strip of mucous membrane from each side of the gap from the tip of the uvula to the very front of the cleft. A free incision was then made along the alveolar aspect of the palate, close against the inner borders of the teeth, and the strips of muco-periosteum which were included between these alveolar incisions and the borders of the cleft were carefully detached by raspatories from beneath the palatine arch and shifted inwards to the middle line. The tension was then relieved by severing the aponeurotic attachment of the soft palate to the posterior border of the hard palate and by extending the alveolar incision backwards as far as seemed necessary through the entire thickness of the soft palate. By this last means the elevators and tensors of the palate and the palato-pharyngei were entirely deprived of injurious influence upon the line of suturing. Though the chief cause of failure of union after operation is probably the incubation of septic micro-organisms, still the risks of the line of suture giving way on account of the child vomiting, crying, or coughing must be reckoned with. Nevertheless, I have seen so many cases in which one or more of these direct causes of danger have been present in a marked degree and yet have done no harm, that I am not much alarmed at their occurrence. If the sutures are soundly inserted they ought to hold. That woman would hardly be worthy of the name of "nurse" who allowed the child after operation to stick his finger into the mouth with the hope of clearing away some unknown source of irritation or annoyance. But no one can prevent the child sucking at the wound or even thrusting the tip of the tongue into the line of sutures. I have, however, adopted a little plan which I think effectually prevents the latter element of danger. It consists in using silver wire sutures somewhat liberally and, after twisting them up, cutting them so that about one-eighth of an inch of each suture bristles downwards along the middle line like the barbs on the wire in a cattle-fence.

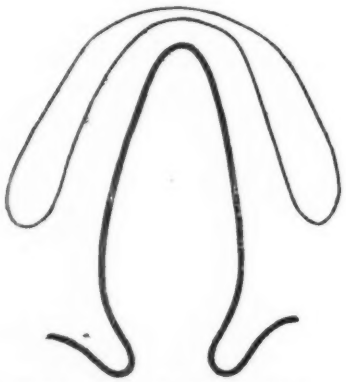
The less the child is disturbed after the operation the better. It is inadvisable to distress or frighten him by giving him food through the nares by a soft tube. If he continues to vomit from the effects of the chloroform the introduction of food into the stomach will certainly be harmful. The best thing is to darken the room and let the child sleep off the effects of the operation. If he makes signs that he wants something to drink a teaspoonful or two of water may be given. Probably in this way twenty-four hours may be passed over. After this, small quantities of beef-jelly may be given in a tea-spoon. The jelly slips down easily and is a clean sort of food. It is far preferable to milk; it does not form curds in the stomach, as milk does, and it is, I think, more easily absorbed. If, when the feeding is begun, the child will allow the nurse gently to spray or syringe out the mouth into a basin, so much the better. But it is a mistake to attempt such irrigation if it frightens the child. As regards the fluid for irrigation, sanitas and water or a very mild solution of carbolic acid or of Condy's fluid does well. In the course of a day or two a little sweetened orange-juice, chicken or meat which has been run through a fine sieve, bread and milk, or a soft custard pudding may be given.

CASE 1.—The first case is that of a girl aged six years and a half, who was sent to me by Mr. Morton Smale last May. This was the worst cleft that I ever attempted to close. It extended through the entire hard and soft palate, the widest part of the cleft being seven-eighths of an inch. One of the students of St. Mary's Hospital, Mr. A. W. Sanders, has made an excellent water-colour drawing of the mouth (a little less than life-size), showing through the cleft the pharyngeal tonsil.[2] Mr. Smale also kindly had a cast of the palate made for me (Fig. 1). A week or so before operating I prepared the way by having some carious teeth extracted and by scraping off the pharyngeal tonsil, or, as it is called, the post-nasal adenoids. I also scraped over the faucial tonsils. The pharyngeal tonsil is well shown in the coloured illustration. The staphyloraphy was a long and tedious affair, and though we succeeded in getting the edges of the cleft together without undue tension, in a few days the whole thing had broken down from stem to stern.

[2] This sketch has been reproduced by chromo-lithography, and appears as a Supplement to this number of THE LANCET.

Moreover, the child looked pale and ill, and the palate and naso-pharynx were covered with foul and tenacious mucus. Not a stitch had held, and the cleft appeared as wide as ever, with an unhealthy gap along the inner border of either alveolar process where the lateral incisions were made. There was no sloughing, however. About ten days after the operation, when the wounds had begun to clean up a little, I placed the patient again

FIG. 1.

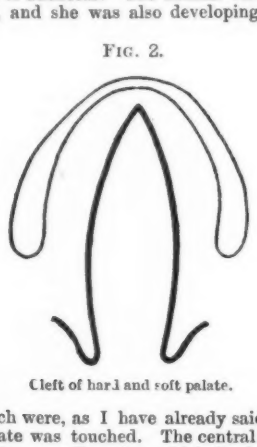


Cleft of hard and soft palate (actual size).

under chloroform, and passing in some strong sutures brought the flaps together once more in the hope that they might be got to unite by granulation. This hope was partly realised; the hard palate is now entirely closed, but a very wide gap in the velum remains to be dealt with when circumstances appear to be favourable.

I am loth to leave the brief report of this case without saying, in parentheses as it were, a few words about the pharyngeal tonsil which, with the utmost fidelity to nature, Mr. Sanders has depicted through the wide cleft. It will be noticed that it consists of a dark, median aperture surrounded by an irregular granular mass. This mass is made up of lymphoid material exactly like that surrounding the apertures in the faucial tonsils. It is the enlargement of this lymphoid tissue which constitutes the disease known as post-nasal growths, or adenoids. The faucial tonsils of this girl were enlarged, and she was also developing a fair crop of

FIG. 2.



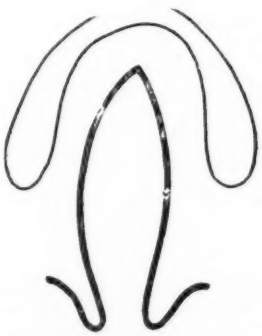
Cleft of hard and soft palate.

adenoids, which were, as I have already said, scraped away before the palate was touched. The central opening of this tonsil leads into a small cavity, which is often spoken of as the "pharyngeal bursa." Early in fœtal life the cavity is continued upwards towards the third cerebral ventricle by a duct known as the cranio-pharyngeal canal, where it apparently ends in anatomical and developmental obscurity.

CASE 2.—The patient was a girl, four years of age, known to Dr. Griffiths of Swansea and to Mr. L. Lewis of Neath, with a cleft extending from a short distance behind the incisor teeth through the soft palate (Fig. 2). It was of fair width, and also through it was visible a large spongy pharyngeal tonsil. I cleared away the adenoids in May last, and a few weeks afterwards I operated on the cleft. Union was perfect throughout except for a pinhole opening towards the front. The hole, however, was so small as not to be actually visible, being hidden in the mucous membrane. By this time I dare say that it is completely closed.

CASE 3.—This patient was a little girl aged three years and one month, under the care of Mr. Biggs of Hendon. Her mouth was small and the muco-periosteum at the edges of the cleft (which involved most of the hard palate) was extremely thin. But as a set-off against this the palate was well arched and the halves of the velum—as shown in the adjoining sketch (Fig. 3)—were not far asunder. The union

FIG. 3.



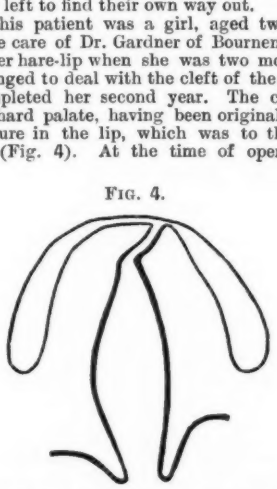
Cleft of hard and soft palate.

was complete throughout. The operation was done in April. I saw her on Nov. 16th last, and found a sound linear scar running through the middle line of the palate and uvula. Just behind the incisor teeth two blackened wire sutures were harmlessly lingering.

After operating on a child I never trouble to remove the sutures, unless when the wound has healed they are still scratching the tongue. The sutures do no harm and they may be safely left to find their own way out.

CASE 4.—This patient was a girl, aged two years, who was under the care of Dr. Gardner of Bournemouth. I had operated on her hare-lip when she was two months old, and had then arranged to deal with the cleft of the palate when she had completed her second year. The cleft extended through the hard palate, having been originally continuous with the fissure in the lip, which was to the left of the median line (Fig. 4). At the time of operation—which

FIG. 4.



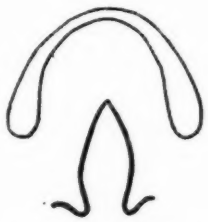
Complete palatine cleft extending forwards through intermaxillary bone.

was the beginning of last June—the palatine cleft still ran through the intermaxillary bone. The disadvantage of this feature was that on the left side the flap of muco-periosteum could not be detached at its anterior extremity lest its blood-supply should prove insufficient. However, the case turned out very well, and when I saw the child on Nov. 15th there was sound and perfect union throughout, except for the presence of a hole at the back of the hard palate of the size of an ordinary shot-corn. With the growth of the child this

will entirely fill up, and, indeed, at the present time I am not sure that the gap does actually extend through into the nasal cavity.

CASE 5.—This, the last of the series, was an infant aged eight months, who was sent to me by Mr. Parsons of Wimbledon. Her cleft involved the soft palate and the posterior third of the hard palate (Fig. 5). I operated on

FIG. 5.



Cleft of soft and of back of hard palate.

er on July 10th, and she was taken home a fortnight later with perfect union even to the tip of the uvula. This was the youngest age—eight months—at which I have ever operated on a cleft which implicated the hard palate, though I have successfully dealt with clefts of the soft palate at an earlier period.

It will be, I think, an interesting and instructive element in the discussion if an expression of opinion is obtained as to what is the best time for endeavouring to close a cleft—(*a*) in the soft palate, and (*b*) in the soft and the hard palate of a healthy child. For my own part I am getting earlier and earlier with my operations; and for this advance I am much indebted to an article written by Mr. Clutton. The fourth patient was only just two years old when I operated on her complete cleft. When her father wrote to me a few days before the operation he said: "She is now two years old, and as far as we can judge her speech will be affected by the cleft." He hit the nail upon the head. If the speech is to be improved to the utmost the mouth must be roofed in at the very earliest moment. For a soft palate, the child being in good health, the time for operating is somewhere in the first six months, I think. For a hard and soft palate together, it is, I think, in the second year, but I should not be surprised to hear that it may safely be shifted to a still earlier period. It will be noticed that in none of these cases have I suggested the division of the operation into two stages—one for the hard and the other for the soft palate. I used formerly to practise that method in certain difficult cases, but I have now given it up. It is full of disadvantages, and I do not find that it possesses any merit to counterbalance them.

Great Cumberland-place, W.

TWO CASES OF LYMPHADENOMA PRESENTING UNUSUAL SYMPTOMS, WITH POST-MORTEM EXAMINATIONS AND COMMENTS THEREON.

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THE two cases about to be related present some unusual features, which in the first were fully explained by the result of the necropsy. They have sufficient interest and importance to appear to me to be worthy of being placed on record.

CASE 1.—A man aged twenty years was on Oct. 30th, 1895, admitted into the London Hospital, under my care, for lymphadenoma. (The notes of the case were taken by Dr. R. M. Going, clinical clerk.) There was no gout, rheumatism, or tuberculosis in the patient's family, and no history or suspicion of syphilis. The present illness began on Sept. 11th, 1895, with acute lumbar pain, which gradually extended first to the right and subsequently to the left sciatic region. About the end of September he was admitted into St. Thomas's Hospital, under the care of Dr. Sharkey, for "double sciatica." At this time he had some pyrexia. He remained in hospital about a fortnight and then discharged himself. After this the pain extended to the abdomen, and Dr. F. H. Davies of Camberwell, his medical attendant, believed he could detect a tumour in that region. I was called in consultation and advised his removal to hospital. Since the commencement of his illness there had been increasing weakness, causing inability to stand, copious night sweats, and numerous attacks of slight epistaxis. On admission to hospital he had an anxious expression, marked anæmia and emaciation, dorsal decubitus, and acute lumbar pain, which was worse on sitting up. The pulse was 120, the respiration 38, and the temperature 102° F. There was a large oval swelling under, and in front of, the middle of the right sterno-mastoid, evidently a mass of enlarged glands. There were also enlarged glands in both supra-clavicular regions, at the left angle of the lower jaw, and in both inguinal regions. They were painless, well-defined, and freely movable under the skin. There was a large patch of discoloured skin over the sacral region, tender to the touch, and giving a somewhat boggy feeling; a sinus situated over the left posterior superior iliac spine seemed to communicate with it. The left ankle and foot were œdematous, but there was no œdema of the thigh or thrombosis of the saphenous vein; the left leg could not be raised by the patient from the bed, but it could be rotated. The extensor muscles of both legs were extremely atrophied, and there was marked tenderness of the calves, but no tenderness over the sciatic nerves. The right knee-jerk was exaggerated, the left being only just present; ankle-clonus was present on the right but not on the left side; the right plantar reflex was well-marked, and the left was only just present. Sensation to touch and pain was normal, but to heat and cold it was absent below the right knee and in the lower half of the left leg. The abdomen was somewhat distended and was tympanitic all over, and, though easy to examine, no tumour could be felt. Nothing abnormal could be felt per rectum. The liver was slightly enlarged. The spleen appeared to be enlarged on percussion, but it could not be felt below the costal margin. There was marked retraction of the second intercostal space to the right of the sternum, with bronchial breathing and bronchophony, but no dulness. No other signs of consolidation were observed. There was some œdema at the base of both lungs. The patient had reflex incontinence of urine (when he felt a desire to micturate he could not restrain it). No albumin was present in the urine. No changes were detected with the ophthalmoscope. Examination of the blood gave the following results. On Nov. 4th the red corpuscles amounted to 42·4 per cent. and the hæmoglobin to 58 per cent.; on the 11th the former were 37 per cent. and the latter 35 per cent.; and on the 16th they were 22 per cent. and 30 per cent. respectively. There was no increase of white corpuscles. The treatment consisted in the exhibition of gradually increasing doses of liquor arsenicalis (four minims to fifteen minims thrice daily). The pyrexia continued, and the patient gradually lost strength. On Nov. 2nd he complained of "soreness of the throat" and difficulty in swallowing; nothing abnormal could be seen on laryngoscopic examination; the difficulty in swallowing increased till liquid could only be taken. The œdema of the lungs increased, diarrhœa developed, the right foot became œdematous, the temperature gradually fell, and the patient died on the eighteenth day after admission and nine weeks after the commencement of the illness.

Necropsy.—The post-mortem examination was made by Dr. Schorstein, whose careful and complete notes are condensed below. The body was much wasted. A distinct abdominal tumour was felt. There was irregular wasting of the muscles of the thighs, especially the left; slight comparative wasting of the muscles of the left arm was also observed, but no wasting of the hands or feet. There were large masses of glands above both clavicles and in the groins. The upper lobe of the left lung was bound down by old adhesions, none being present on the right; both pleuræ contained some yellow serous fluid. A large mass of matted glands surrounded the right bronchus and pressed chiefly on the branches going to the middle and lower lobes, which were largely collapsed. The rest of the lungs was œdematous. The left external iliac vein was partially invaded by the growth, and a small thrombus of dark colour lying along the outer side of the vessel an inch and a half long was contained

in it. The lumen was diminished, but no actual blocking of either external iliac vein was present. A large glandular mass extended along the aorta from the diaphragm to the pelvis and invaded the sacrum. The whole of the lumbar nerves on both sides, and all the sacral nerves as they issued from the foramina, were surrounded and infiltrated by the growth. Both psoas muscles were invaded by the growth, and the left was much atrophied. On the right side the growth extended back between the transverse processes of the second, third, and fourth lumbar vertebræ, invading the erector spinæ muscle, and it extended along the nerves into the spinal canal, forming on the posterior part of the bodies of the second to fourth lumbar vertebræ, slightly to the right of the middle line, a protuberant mass one-sixth of an inch in elevation, lying beneath the dura mater, pressing it backwards, and pressing on the right side of the cauda. The spinal cord seemed to be normal on section to its lowest limits. The cauda was slightly pressed upon by the growth within the canal, but all the nerves below the first lumbar were surrounded by growth and involved after their exit through the anterior foramina. The pelvic mass of new growth invaded the sacrum and both sacro-iliac joints. The left upper angle of the sacrum was especially involved, and the growth formed a mass in the sacrum, left sacro-iliac joint, and adjoining portion of the ilium, being extremely soft, and breaking down on the slightest pressure. With this a sinus over the posterior superior spine of the ilium communicated, and there was a small bedsore over the lower part of the sacrum. At the upper part of the abdominal mass the growth formed a ring, completely surrounding the lower part of the œsophagus where it joins the cardiac and of the stomach. The mass pressed upon the œsophagus and partly invaded its outer wall, but the mucous membrane was quite intact. The mesenteric glands were all enlarged. The spleen weighed 10 oz. and was soft, natural in colour, and free from growth. The liver weighed 4 lb. 1 oz.; the central veins were more full than natural, being otherwise normal. The remaining organs presented no important changes. The growth on section was yellowish-white, very soft, and dotted with hæmorrhages, small in size, and little masses of black pigment. Under the microscope there was seen very little reticulum, forming large meshes, and between the meshes there were closely packed masses of small round cells with badly defined nuclei.

Remarks.—When I first saw this patient with Dr. Davies on Oct. 23rd he gave me the history of the "double sciatica"; he told me that the patient since being under his observation had had a temperature averaging about 102° F., and he thought he had detected a mass in the abdomen. On the occasion of my visit neither of us could feel it. A day or two before my visit enlargement of the glands on the right side of the neck was detected. I examined the patient carefully all over, and found that there was pain on movement of the lower extremities, especially the left, but at that time no obvious weakness; at least, the pain caused by movement appeared to account for its limitation. The skin over the sacrum was red, tender, and œdematous. I was impressed with the great pallor of the patient, and this, together with his high temperature, which had persisted for some time without any satisfactory explanation, as well as the attacks of epistaxis, led me to express an opinion that he was probably suffering from some grave disease of the blood. The enlarged glands in the neck, which were firm and covered by healthy skin, appeared to supply the key-note to the case. With some diffidence I expressed an opinion that it would prove to be one of lymphadenoma, and I suggested that the pain in the lower extremities might be due to invasion of the cord or nerves by a growth of this nature. I offered to take the patient into the hospital under my care in order that he might have the benefit of better nursing and treatment than he could receive at home. When he came to the hospital, seven days later, the disease was more advanced. The glandular swellings now involved the left side of the neck and both inguinal regions, and their characters were of a pronouncedly lymphadenomatous nature. The examination of his blood showed a high degree of anæmia without any increase of white corpuscles. He now had œdema of the left foot and ankle, wasting of the extensor muscles of the thighs, and tenderness of the calves. The left knee-jerk was almost abolished, whilst on the right side the knee-jerk was exaggerated and ankle-clonus present. The careful observations of Dr. Going further showed that whilst sensation to touch and pain was not altered he had lost thermic sensibility in the lower half of the left leg and below the knee in the right. The condition of the skin over the sacrum appeared to be due to a bedsore produced before I first saw him. The liver was found to be slightly enlarged. With these additional observations I was able to reaffirm my original diagnosis with greater confidence—viz., that the patient was suffering from lymphadenoma, and that the new growth involved the spinal cord or nerves of the lower extremities. As to which of these the paralysis of the legs was due I had some doubts; but the tenderness of the muscles, and in a degree the sensory disturbances, made me feel the difficulty in excluding the nerves. The disease rapidly progressed, the only new symptom arising being dysphagia. The voice was natural, and laryngoscopic examination showed no disease as far as the level of the larynx. I conjectured, therefore, at the bedside that it was due to pressure on the œsophagus by lymphadenomatous growth. The post-mortem examination verified the diagnosis to a degree which I wish were my usual experience. There was an extensive new growth forming a large solid tumour behind the attachment of the mesentery, extending from the level of the third lumbar vertebra downwards into the pelvis. It involved the posterior part of the left ilium and ala of the sacrum, invading both ilio-sacral joints, and the sinus detected during life over the posterior superior spine of the ilium extended down to the diseased joint. The spinal canal was invaded by the disease. The spinal cord was not actually compressed, but the cauda equina was. Another mass pressed upon the termination of the œsophagus in the cardiac orifice of the stomach, but the stomach was not infiltrated. Another mass involved the roots of the lungs and by pressure on the right produced collapse of the middle and lower lobes of that lung. The lymphatic glands of the neck and groins were affected. The liver and spleen, though enlarged, had no new growth in them. The growth, examined microscopically, proved to be lymphadenoma. The diagnosis was thus confirmed in every particular. The only important additional revelation was the growth at the roots of the lungs, producing some collapse of the right lung. This might have been detected, but the patient was so weak, and movements caused him so much pain, that the back of the chest was not examined during the last week of his life. The physical signs in the right intercostal space afforded some grounds for a diagnosis of this lesion. The accuracy of Dr. Davies's observation earlier in the case of an abdominal tumour was also established; but, probably owing to distension of the intestines, this could not be felt later. The most unusual feature of the case was the invasive character of the growth. I do not remember to have previously met with a case in which the spinal cord was penetrated by a lymphadenomatous growth from without, and it is certainly very unusually recorded in the literature of the subject. But, though the spinal canal was penetrated, the cord was not actually involved in the growth either by infiltration or pressure; at least, the cord was not in any way flattened, as it would have been had it been subjected to any degree of pressure. The tumour, when its bloodvessels contained circulating blood, would, of course, have been of larger dimensions and may have touched the cord, but not so as to compress it to a degree to give rise to symptoms. The pain, wasting, weakness, and anæsthesia must therefore be referred to pressure on the cauda equina and the nerves. The œdema of the lower extremities was partly due to pressure upon and (on the left side, where the œdema commenced) invasion of the external iliac vein, where a thrombus was found, though the lumen of the vein was not entirely occluded. No doubt cardiac feebleness from his exhausting febrile disease, and loss of movement in the limbs, were contributory factors. The invasion of the sacro-iliac joint was also an unusual feature of the case, as well as the inflammation of the skin over the sacrum due to implication of the posterior branches of the sacral nerves. The inability to raise the left thigh whilst power of rotation remained is probably explained by the direct implication of the psoas muscle. The disease ran a much more rapid course than is usual in lymphadenoma, illustrating both in its course and invasive characters the high degree of malignancy to which this disease may attain, and is in contrast to the almost chronic characters which some cases of lymphadenoma present. In this respect, as well as in its histological characters, lymphadenoma approaches so closely to the sarcomata that it is regarded by many pathologists as a variety of sarcoma—viz., lympho-sarcoma.

CASE 2.—A man aged fifty-three years was on March 20th, 1895, transferred to my care by my colleague, Mr. J. McCarthy. The patient complained of weakness, wasting, and pain in the "inside." The following notes are reduced from the records of Messrs. H. Innes and H. F. Tod. The patient's father was gouty, but there did not appear to have been any other tendency to disease in the family. He himself had been a hard-working man, a moderate drinker in recent years, but at one time took stimulants rather freely. He was the father of eleven children all of whom were healthy. He had always been neurotic. He had suffered from gonorrhœa thirty years before, but had never had syphilis. He had had a "slight touch of rheumatism, which was more of a sciatica," in both legs four months previously. It would begin about 4 o'clock in the afternoon and last till about 2 A.M. the next morning. The pain was excruciating, and he could hardly walk. He had suffered from "winter cough" the previous three years. His present illness began in the previous November with pain in the stomach, where he had a sense of weight and a feeling of "wind," which were increased by food and towards evening. His appetite was good at that time and he did not vomit. His symptoms continued in spite of treatment, and he noticed that he was losing flesh. For some years he had had some vaso-motor functional disorder in his hands and feet, not amounting to Raynaud's disease. On admission he said that since November he had not been able to lie on his left side on account of pain. He could not sleep at night owing to pain and a sense of weight in his stomach. He was anæmic, with a yellowish tint of the skin, which was dry, harsh and furfuraceous. The veins of the neck pulsated. He said that the week before last the calves of his legs swelled up and had been puffy occasionally since. The tongue was slightly deflected to the right, and was dry and coated with white fur. He had no appetite; the bowels were regular; the abdomen was distended and was tympanitic in front and somewhat dull in the flanks. He complained of pain, which was most marked in the epigastrium, but extended into the right and left hypochondria. There was tenderness on pressure, especially in the flanks; there were borborygmi; but no tumour was detected. The liver extended from the sixth rib to a little below the costal margin. The spleen was enlarged, extending from the seventh rib to some distance below the ribs, where it could be felt to have a rounded edge. The stomach resonance extended well up into the thorax. The pulse was 93; the arteries were somewhat tortuous, but tension was not increased. The apex-beat was in the fifth space and feeble; dulness was lost from stomach resonance. There was no bruit. No abnormal signs were detected in the lungs beyond a few crepitant râles at the bases posteriorly. There were numerous enlarged glands in the neck, extending from the lobule of the ear to the supra-clavicular fossa on each side, but larger on the left side than the right. They were hard, and matted together when large, but when small isolated and movable; they varied from the size of a horse-chestnut to that of a pea. There were enlarged glands with the same characters in both axillæ and both groins. They were not tender at any part. The first glandular enlargement had been noticed seven years ago on the left side of the neck, and the glands had been increasing in size and extending in range since then in the neck, but he had not noticed them elsewhere. No abnormal signs were observed in the fundi. The temperature was normal, and no albumin was present in the urine. The knee-jerks were present. The patient could walk, but became breathless on exertion. He had lost much flesh lately. The blood when examined a few days later showed 76 per cent. of red corpuscles; there was no increase of white corpuscles, which in eosin- and logwood-stained specimens showed some varieties, but no one kind was predominant. The progress of the case may be briefly summarised as follows. Œdema of both feet appeared, extending to the legs, and later to the back. The urine remained free from albumin to the end; the quantity slightly diminished, but the specific gravity was within the normal range. The temperature was usually near to the normal, but was slightly raised at the close. Complete anorexia became established and was attended with some nausea but no vomiting. He suffered a good deal of pain and discomfort in the stomach. Examination of the blood at a later period showed 60 per cent. of corpuscles, the proportion of white to red being 1 in 120; and one week before his death the red corpuscles amounted to 89 per cent. and the hæmoglobin to 54 per cent.—there was 1 white corpuscle to 100 red corpuscles. Cough and some breathlessness developed; the physical signs of bronchitis were present, and later there was evidence of basic œdema. He died on May 13th. The treatment consisted of the administration of arsenic (ten minims of Fowler's solution three times a day), washing out the stomach every second day, and chloral and bromide of potassium for sleeplessness. Tabloids of supra-renal capsule were tried for some days, one being taken after each meal and one at bedtime. They seemed to increase the nausea, and when the patient took them his temperature began to rise and become remittent. As they did not appear to exercise any favourable influence they were discontinued.

Necropsy.—A post-mortem examination was made on May 14th, 1895. The following notes were taken by Dr. Bertrand Dawson. In the abdomen a hard, dense, and whitish tissue was adherent to the bodies of the vertebræ. It was chiefly situated in the upper part of the abdomen, but extended in smaller amount as far down as the bifurcation of the aorta. The growth above was adherent to the posterior aspect of the stomach, and this viscus was immovably fixed; it also surrounded the pancreas, which could not be separated from it. Many enlarged glands were buried in this dense tissue. On cutting into this mass the section resembled scirrhus, but a careful examination of several microscopic sections showed it to be nothing but dense fibrous tissue surrounding enlarged glands. Chains of enlarged glands lay along the curvatures of the stomach. The mesenteric glands were also enlarged. The above growth closely encircled the supra-renal capsules, which could not be separated from it, but the latter were quite healthy, as were also the kidneys. The spleen was much enlarged, weighing twenty-one ounces. On section it showed many small white nodules which were typically lymphadenomatous. As regards the liver the glands in the portal fissure were much enlarged, but there was no infiltration of the organ. There were old adhesions of the pleuræ on both sides of the chest. The bronchial glands were a little enlarged. Microscopic section showed the usual appearance of lymphadenoma.

Remarks.—There are several points of interest in Case 2, which was treated previously to Case 1, but I couple it with the former on account of the patient having suffered from pain in both legs, which was thought to be "sciatica." Lymphadenomatous growth was found adherent to the bodies of the vertebræ as low down as the bifurcation of the aorta. Attention was not particularly directed to this part at the necropsy, but in the light of the subsequent case (Case 1) I regret that more care was not given to the examination of the sacral nerves, which may have been compressed by growth which did not attract observation. The case in most respects exemplified the usual course of this disease—viz., glandular enlargement, limited for a long time to the neck, and then later generalisation. In this case the spleen had lymphadenomatous growths in its interior, whilst in Case 1 none were present. There was one further feature calling for remark—the predominance of gastric symptoms. It happened that when this patient was in the hospital I had at the same time a case of leucocythæmia as well as one of pernicious anæmia. I made the three cases the subject of a clinical lecture, instituting a comparison and a contrast between the three diseases. In commenting on the case of lymphadenoma I drew attention to the gastric symptoms and discussed the possibility of there being cancer of the stomach. I remarked, however, that, whilst the diagnosis of cancer of the stomach would explain the pain, nausea, complete anorexia, and the wasting and anæmia, it would not account for the generalised lymphatic enlargement. At the post-mortem examination the appearance of the stomach made all present suspicious that there was scirrhus of that organ, but careful examination showed that the infiltration which fixed the viscus was lymphadenomatous growth with an extreme amount of over-growth of fibrous tissue. Both cases were treated with arsenic, but without benefit, though in a very small minority of cases the drug undoubtedly appears to exercise an almost specific influence. I know of no criterion by which the cases in which the treatment will succeed can be determined, but it should certainly, in spite of many failures, be tried in all cases. The non-success of the supra-renal capsule extract should not discourage other attempts to try this remedy. The disease was very far advanced when it was prescribed. The suggestion of its use came from Dr. Oliver of Harrogate, who one day accompanied Dr. Ralfe on his visit when he was in charge of my wards.

Cavendish-square, W.

CASES OF HEART DISEASE TREATED BY THE "SCHOTT" METHOD.

BY LESLIE C. THORNE THORNE, M.D. DURH.,
LATE HOUSE PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL.

SINCE the method of the treatment of chronic heart disease known as the "Schott" method is at the present time more or less on its trial in England, I venture to give a short account of my experience of this treatment during four months which I spent at Llangammarch Wells, Central Wales, where I had under my care twenty-six cases. Llangammarch Wells is in every way admirably suited for a health resort. Facing north-west and being 600 feet above Ordnance datum, but well protected from the east by a high range of hills and separated from the sea coast by little else than mountainous country, the character of its air is most invigorating, and, quite apart from the therapeutic value of the "Barium" springs, it would be difficult to find any place better suited for the successful carrying out of this treatment. My cases comprised many different forms of cardiac disease, and all but two gave most satisfactory results. In one of the latter calcareous degeneration of the vessel walls played a prominent part in the circulatory mischief, whilst in the other malarial attacks occurring in a patient who had lived in India for many years prevented the treatment from being properly carried out. The outlines of the treatment as adopted by Dr. Schott are now too well known to need description, so it is my intention here, firstly, to briefly discuss the *rationale*, and secondly, to give a few results of the treatment, rather than to describe a method which has been recently so well expounded by more than one observer.[1] I would only state that I began the treatment by baths in the waters derived from the "Barium springs" of Llangammarch Wells, the constituents of these waters being, according to an analysis made at THE LANCET Laboratory in November, 1894,[2] as follows:—

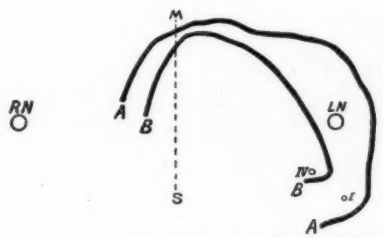
	Grains per gallon.
Chloride of barium	6·749
Chloride of sodium	186·200
Chloride of calcium	85·160
Chloride of magnesium	20·100
Chloride of lithium	0·847
Chloride of ammonium	0·262
Alumina and silica	3·340
Bromine as bromide	Distinct traces.
Total mineral matters	302·658

To these natural constituents I at first added sodium chloride, later I added calcium chloride, and lastly Sandow's effervescing tablets in order to approximately represent the different strengths of baths used at Nauheim; the exercises and the internal administration of the waters also formed part of the treatment.

The two theories at present upheld as to the *rationale* of the system are: firstly, that of Dr. Schott, who maintains that the baths and exercises act upon the heart through the nervous system, causing a reflex influence, which stimulates the action of the cardio-inhibitory nerves and thereby slows and strengthens the pulse; and, secondly, that adopted by Sir William Broadbent, Dr. Bezly Thorne, and others, to the effect that the baths and exercises cause dilatation of the muscular and cutaneous vessels and thus relieve the heart from backward pressure. Dr. Robert Saundby maintains that the effect of the baths and exercises is to slow the heart and raise the blood-pressure, supporting his opinion by Marey's law, and giving sphygmographic tracings before and after baths, and exercises to illustrate his points, and there is no doubt that his tracings taken before and after exercises do show what he maintains, but those taken before and after the baths show very little difference, one of the two latter tracings indicating, in fact, a slightly larger volume after than before the bath. It is my opinion, formed upon the observation of my cases, that as a general rule the pulse is reduced in frequency, increased in volume, and decreased in tension both by the baths and by the exercises, and this, I take it, is the result that should be aimed at: in the baths by the regulation of the strength and the time of immersion, and in the exercises by regulating the number of exercises given and the resisting force employed. I give below the sphygmographic tracings of two cases taken before and after baths (Nos. 1, 2, 3, and 4), and those of two cases taken before and after exercises (Nos. 5, 6, 7, and 8), which show precisely the points I maintain. These indications lead me to believe that the effects of the baths and exercises upon the circulatory system are principally mechanical, the baths acting more directly on the vessels of the skin, and the exercises on the vessels of the muscles, causing both of these sets of vessels to dilate. In this way the heart has less pressure to work against, so that it is enabled to work more slowly and more efficiently, the greater calibre of the vessels causing the arterial tension to be lowered. The heart's action, being less rapid and rendered more powerful, probably raises the arterial tension again, but not to the extent it exhibited before the bath or exercise was commenced. I now propose to describe a few cases and to record the sphygmographic tracings and cardiac dulness of each before and after treatment. Great improvement in the pulse and diminution of the cardiac dulness is shown in each case.

CASE 1.—The patient, a married woman aged forty-eight years, who had had rheumatic fever three times, was suffering from aortic stenosis, mitral regurgitation, and a dilated heart. She was despondent, was troubled with dyspnœa on

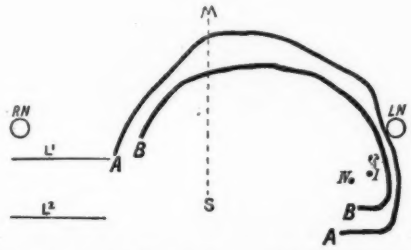
FIG. 1.



the least exertion, and subject to fainting fits; her lips were somewhat blue. She had some œdema of the lower extremities and a definite cloud of albumin in the urine. Her pulse was 72, regular in time, small in volume, and of *plus* tension. I give below sphygmographic tracings of her pulse before and after treatment (Nos. 9 and 10), and tracings of her cardiac dulness before and after treatment (Fig. 1, A, A, and B, B). At the end of ten weeks' treatment her colour was much improved; there was no œdema of the lower extremities and no albumin in the urine. She could walk up a fairly steep hill with comfort and was more cheerful. She had taken no drugs and was not kept in bed for a single day. It will be seen by comparing the tracings of her cardiac dulness (Fig. 1, A, A, and B, B) that it was considerably diminished at the end of the treatment, and by comparing the two sphygmographic tracings (Nos. 9 and 10) the great improvement in her pulse is made evident.

CASE 2.—This patient was a single man aged thirty-six years. He was temperate. He had had influenza three times, the last attack being four months before

FIG. 2.



L¹ and L², Height of liver dulness before and after treatment.

I saw him. Since this last attack he had done no work and had been under medical treatment, suffering from weakness, loss of appetite, insomnia, extrem nervousness,

[1] The Schott Method of the Treatment of Chronic Heart Disease. By Dr. Bezly Thorne. THE LANCET, May 5th, 1894.—Remarks on the Nauheim (Schott) Treatment of Heart Disease. By Dr. R. Saundby. Brit. Med. Jour., Nov. 2nd, 1895.

[2] THE LANCET, Nov. 24th, 1894.

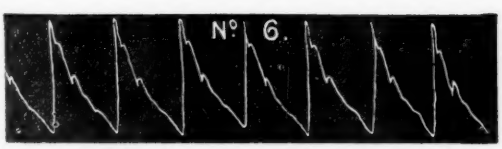
Before bath.

After bath.

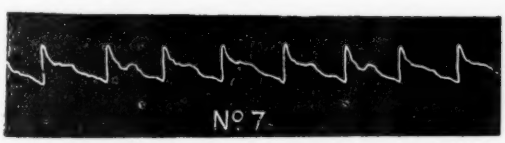
Before bath.

After bath.

Before exercises.

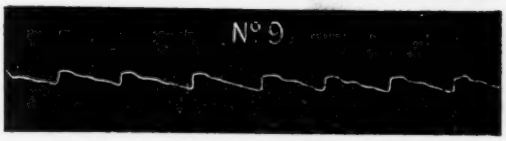


After exercises.



Before exercises.

After exercises.



Case 1 before treatment.

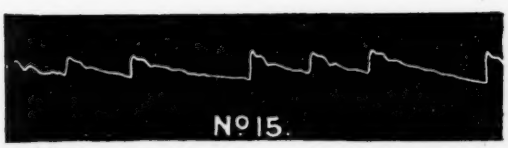
Case 1 after treatment.

Case 2 before treatment.

Case 2 after treatment.

Case 3 before treatment.

Case 3 after treatment.



Case 4 before treatment.

Case 4 after treatment.

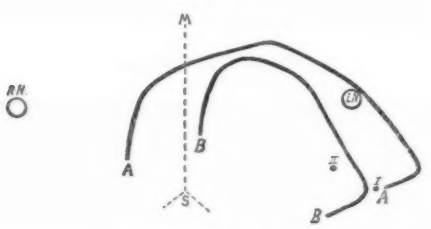
palpitation, occasional dyspnœa, and tremors. When first seen he looked ill; his hands and tongue were tremulous; his pulse, as may be seen (Tracing No. 11), was rapid, 132 per minute, very small, fairly regular in time, and of *plus* tension; his heart was dilated (Fig. 2, A, A), and his liver was enlarged. All his other organs were apparently healthy; there was no albumin in the urine. The reflexes were increased. I show below the very marked effect of the first bath upon the frequency of his pulse during five minutes' immersion:—

Pulse-rate	before bath (previously to undressing)...	100	per minute.
,,	after 1 minute in the bath	88	,, ,,
,,	,, 2 minutes ,, ,, ,, ...	84	,, ,,
,,	,, 3 ,, ,, ,, ,, ...	80	,, ,,
,,	,, 4 ,, ,, ,, ,, ...	84	,, ,,
,,	,, 5 ,, ,, ,, ,, ...	76	,, ,,
,,	after dressing	80	,, ,,

This patient was under treatment for four weeks only, when he was obliged to return to his work. At the end of his treatment he slept and ate well, had no tremors, no palpitation or dyspnœa, and felt much better and strong enough for work. His average pulse-rate was 80 per minute, and from the sphygmographic tracing (No. 12) it will be seen that his pulse was of much larger volume and more natural tension than before treatment. The tracings of his cardiac dulness (Fig. 2, A, A, and B, B) show the marked diminution after treatment.

CASE 3.—The patient was a young man aged twenty-three years. He had had rheumatic fever about two months before I saw him, having been confined to his bed for six weeks, since when he had not been strong enough to do his work. He had had palpitation frequently accompanied by precordial pain, and shortness of breath on slight exertion; at times he had pain in the knees, elbows, and shoulders. When I first saw him he looked ill, was anæmic, and complained of pains in the knees, which were, however, neither swollen nor hot. His temperature was normal. His pulse was 100, of poor volume, and *plus* tension, being regular in time and volume (No. 13). The heart's apex-beat was forcible and diffuse, and a definite presystolic thrill could be felt over it. A very marked presystolic murmur was heard at the apex and over a small area round it; no other murmur could be made out. His cardiac dulness, taken by ausculto-percussion, was much increased. (Fig. 3, A, A) All the other organs were apparently healthy. The urine contained no albumin. After four weeks' treatment by baths, exercises, and internal administration of the "Barium" water he looked practically well; his

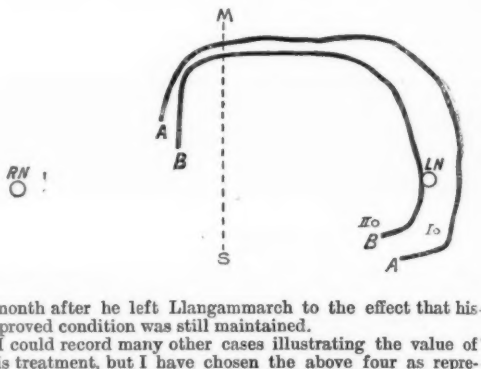
FIG. 3.



colour was much improved, he could walk uphill without discomfort or difficulty, he did not suffer from palpitation and his rheumatic pains had left him. His pulse, as will be seen by comparing tracings (Nos. 13 and 14), was of much better volume and of more normal tension, and its rate averaged 80 per minute. His cardiac dulness was much smaller. (Fig. 3, B, B) (I may here mention incidentally that the waters of Llangammarch Wells are extremely useful in the treatment of chronic rheumatism.) A month after he left Llangammarch he wrote to tell me that he was still improving, a common experience of many patients for some time after cessation of treatment.

CASE 4.—This patient was a man aged sixty-nine years. He had always been abstemious and was not an excessive smoker. He gave no history of any serious illness except an attack of influenza two years previously to my seeing him. Since that time he had had frequent attacks of palpitation and breathlessness, accompanied by a very intermittent pulse. (Tracing No. 15.) He also suffered from insomnia caused by cardiac distress. He had been treated with digitalis and other cardiac tonics on and off for two years, during the whole of which time he had kept to his work. When I saw him his pulse was small, intermittent in volume and time, and of *plus* tension (Tracing No. 15); his vessels felt healthy. His heart was dilated (Fig. 4, A, A); the apex-beat was only just perceptible to the touch, and his heart sounds, especially the first, were almost inaudible; no cardiac murmur was heard. All the other organs were apparently healthy. After his first exercises his pulse was quite regular (tracing No. 6) and remained so, with only occasional exception, during the course of treatment. After four weeks' treatment his condition was as follows. He felt much better and slept well; his pulse was regular in time and volume, and of much better volume and more normal tension than before treatment (Tracing 16). His cardiac dulness was a good deal smaller (Fig. 4, B, B). I heard from this patient

FIG. 4.



a month after he left Llangammarch to the effect that his improved condition was still maintained.

I could record many other cases illustrating the value of this treatment, but I have chosen the above four as representing different classes of cardiac disease. The two patients in whose cases influenza seemed responsible for the cardiac mischief had little in common, differing greatly in age and general characteristics. In conclusion, I would say that the treatment in question has shown itself to be of great value in many forms of cardiac disease, and that I have found it to answer well in several cases where drugs had been tried with no very satisfactory result. I would further express the opinion that there is no necessity for persons desirous of undergoing this treatment to go to Nauheim, for to my knowledge it has been successfully carried out in many places in this country, notably in London, Buxton, Birmingham, Llangammarch, and Leamington.

Inverness-terrace, W.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—A clinical meeting of this society was held on Tuesday, Dec. 17th, 1895, Dr. Adolph Bronner, President, in the chair. Dr. Crawford gave a microscopical demonstration. Dr. Major showed the following cases: 1. Patient with Tumour of Brain—a man with right hemiplegia and partial motor aphasia. There was Jacksonian epilepsy, affecting the leg and arm, headache, vomiting, and double optic neuritis. The diagnosis was a subcortical tumour in the left cerebral hemisphere. 2. A woman with Floating Kidney. 3. A man suffering from Locomotor Ataxy. The lightning pains from which the patient suffered were much relieved by Blondel's method of treatment, which consists in tying the patient's knees as near his chin as possible for five minutes daily. Dr. H. J. Campbell showed: (1) A man suffering from Progressive Muscular Atrophy, who was much improved in his power of walking by subcutaneous injections of $\frac{1}{100}$ to $\frac{1}{75}$ gr. of nitrate of strychnine daily; (2) a child with an Abdominal Tumour, probably sarcomatous in nature; and (3) a man with Aneurysm of the Aorta. Dr. Rabagliati described a case in which there had been unusual complications met with during Ovariotomy. The bladder was found to be drawn up in front of the tumour. Dr. Althorp showed a girl with a Recurring Growth on the Chin. Microscopically the growth was an epithelioma. Mr. E. G. Firth showed a child with Congenital Absence of Radius on each side. Dr. A. Bronner showed a series of cases illustrating the Treatment of Cataract; also a case of Traumatic Conjunctivitis treated by Hot Fomentations.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF SUPRA-PUBIC PROSTATECTOMY (McGILL'S OPERATION), ILLUSTRATING A METHOD OF ARREST OF HÆMORRHAGE BY PACKING THE BLADDER WITH A ROLL OF GAUZE.

By H. LITTLEWOOD, F.R.C.S. ENG.,
SENIOR ASSISTANT SURGEON TO THE LEEDS GENERAL INFIRMARY.

A MAN aged sixty-nine was admitted to the Leeds General Infirmary on Aug. 19th, 1895, with retention of urine due to prostatic enlargement. He was a pale, feeble old man, suffering from a good deal of pain in the vesical region and perinæum. This was somewhat relieved by a catheter but the passage of the instrument caused great pain. The urine drawn off was foul, alkaline, and contained some pus and blood. On rectal examination there was found to be marked enlargement of the prostate. During the past two years he had been troubled with frequency of micturition and occasional attacks of retention. A catheter had relieved the retention, and at times he had passed one for himself, whenever he felt that he required it. The present attack commenced on Aug. 16th, when he had to micturate every ten or fifteen minutes, only passing small quantities of urine. On the 17th a catheter was passed with some difficulty, and the bladder was relieved in this way until his admission to the Leeds General Infirmary. On the 21st his condition was only slightly improving, the retention being absolute. The urine had slightly improved. On the 22nd the patient was put under chloroform. The bladder was opened in the supra-pubic region and fixed to the abdominal walls with some silk sutures. On introducing the finger there was found to be a large intra-vesical projection of the prostate, chiefly in the situation of the so-called middle lobe. The mucous membrane to one side of the middle line was divided with a long pair of pointed scissors in the vertical direction for about an inch, then with the forefinger three masses of prostate were enucleated; these collectively weighed nine drachms. There was a good deal of bleeding. The bladder was well washed out with some hot boracic acid solution, but this did not stop the bleeding, so one end of a long roll of cyanide gauze well sprinkled with iodoform was packed down to the prostate; the other end of this protruded through the vesical opening for about one inch and a half. The gauze practically filled the bladder and at once arrested the hæmorrhage; it also acted as a drain for the urine. The upper and lower parts of the wound were now sutured with silkworm gut. The patient had a good night after the operation, and a fair quantity of urine drained away by the gauze. This latter was removed at the end of thirty-six hours and was found to be thoroughly soaked with urine; there were some clots in the part which had been in contact with the torn prostate. No bleeding occurred after the removal of the gauze, and it was found to have soaked up all the urine in the bladder. A large drainage-tube was inserted, which was removed on the 25th. On the 26th he got up for one hour. On the 30th the stitches were removed from the bladder. He now got up every day, and on Sept. 3rd was up for six hours. All the urine was coming by the wound; this was granulating well, and the urine was quite clear. On the night of Sept. 8th he passed some urine per urethram. On the 10th he passed nearly all the urine the right way, and on the morning of the 11th the supra-pubic wound appeared to be quite healed. He went home on the 14th. On Nov. 8th the patient was quite comfortable, had gained weight, and was passing urine every three or four hours during the day and getting up once and sometimes twice at night.

Remarks.—After removing large pieces of prostate the rapid arrest of hæmorrhage becomes an important question in a certain number of cases. I cannot help thinking that the method adopted in this case may prove of equal value in those of a similar nature. In addition to the arrest of hæmorrhage the roll of gauze acted as an admirable drain, leaving no urine in the bladder for decomposition, and in this way must have been a factor in clearing up the cystitis. I have to thank Mr. W. E. Maw, the dresser in charge of the case, for the above notes.

Leeds.

HYDATIDS OF THE HEART.

By W. H. E. KNAGGS, M.D. EDIN.,
SURGEON, SS. "DUNOTTAR CASTLE."

THE following case seems to me to be of considerable interest. A man on board a South African liner was sitting in his cabin on the evening of Oct. 20th, smoking and talking to some of his companions, when he suddenly fell over on his back. I was called and saw him almost immediately. I found him in a state of profound syncope, from which I was unable to rouse him. He died within a minute of the seizure. I was unable to get any clue as to the cause of death, so I made a post-mortem examination. The abdominal and thoracic organs were found to be all healthy, with the exception of the heart, which was greatly enlarged and had a mass of hydatid cysts embedded in the wall of the left ventricle; the typical hooklets were found in the fluid from the cysts. There was no communication with the ventricular cavity. The brain was not examined. In spite of careful inquiries I was unable to discover that the deceased had complained of any symptoms referable to impaired heart's action. He had always enjoyed excellent health. I may mention that he had never been in Australia or New Zealand.

MODIFICATION OF HÆMORRHAGIC SMALL-POX.

By FRANK ROBINSON, M.D., CH.B. VICT.,
RESIDENT MEDICAL OFFICER, CITY HOSPITAL, PARK-HILL, LIVERPOOL.

I BELIEVE it is a well-established fact that an attack of small-pox, whether discrete or confluent, may be arrested at any stage, chiefly, though not exclusively, in the vaccinated. I can find no reference, however, to this modification occurring in hæmorrhagic cases, but the possibility has been suggested to me by a case under my care in the Bradford Small-pox Hospital in January, 1894. The patient was a woman aged thirty-four years, with two very faint marks of primary vaccination one-third of a square inch in total area. She was six months pregnant. She said that on Jan. 2nd she caught cold and had pain in the back, but had quite recovered by Jan. 8th, when her gums began to bleed and she also noticed a rash. When admitted on Jan. 10th the patient was very prostrate; the face was dusky, with black rings round the eyes; the pulse was 108, though the temperature was but slightly elevated. A scanty variola eruption was present on the face, limbs, and back, partly papular and partly showing the crusts of dried vesicles; into some spots there were hæmorrhages. On the legs, especially the shins, were numerous petechiæ, and on the abdomen was a smaller number of petechiæ with a few small ecchymoses. There was also constant oozing from the gums round the teeth. For several days free stimulation was required; after this improvement was rapid. In two weeks the hæmorrhage from the mouth had ceased, and a week later the subcutaneous hæmorrhages had disappeared. The pregnancy was uninterrupted, and I learned that the patient was confined without post-partum hæmorrhage. Her menstrual history and that of previous labours are normal, and she never suffered from any form of hæmorrhage before the attack of small-pox. The diagnosis of small pox was readily made from the nature and distribution of the eruption together with the extreme prostration, and was strengthened by the fact of a badly-vaccinated pregnant woman remaining for a month in a small-pox ward without harm resulting. That the subcutaneous hæmorrhages were not prodromal is certain, I think, judging from their dark-blue colour and their long duration, and certainly the hæmorrhage from the gums cannot be assigned to that class. Subcutaneous hæmorrhages are not unfrequently observed in the course of a normal case, but they occur later, and I think are not seen quite apart from the eruption. From the degree of prostration, the nature and duration of the hæmorrhages, and the

character of the rash, I am inclined to believe that the case was one of abortive hæmorrhagic small-pox, the modification being due possibly to the primary vaccination. I shall be glad to know whether this condition is recognised, and if similar cases are recorded.

Liverpool.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

TWO CASES OF HEPATIC ABSCESS; OPERATION; RECOVERY.

(Under the care of Dr. J. ANDERSON and Mr. W. JOHNSON SMITH.)

THESE cases are examples of some of the methods of treating hepatic abscess at the present day. The larger number of cases of this disease are met with at hospitals such as the Seamen's, which collect patients chiefly from foreign parts. Sometimes, however, a case of acute abscess with dysentery may be admitted into a general hospital in the summer time, although the patient has never visited the tropics. Two methods of treatment are shown, both of which proved successful: (1) free incision in Case 2, where the structures overlying the liver were adherent from extension of the inflammation to the abdominal parietes; and (2) operation in two stages across the pleural cavity in Case 1—viz., resection of rib and suture of the healthy layers of the pleura to each other in the first stage, and then, three days later, incision through the diaphragm into the abscess, with drainage. For the notes of these two cases we are indebted to Dr. C. W. Windsor.

CASE 1.—A native of Zanzibar aged twenty-seven years was admitted to the Seamen's Hospital, Greenwich, on Aug. 17th, 1895. He complained of pain in the right side of the abdomen and chest, from which he had suffered for one month. Four months before admission he had an attack of diarrhœa lasting one month, with very frequent small stools containing a good deal of mucus, but no blood. For three weeks previously to admission he had a similar attack of diarrhœa and tenesmus, but no blood was passed. He had never had malaria. He had not suffered from vomiting or jaundice, but he had lost flesh during the previous few months. On admission he was found to be a fairly nourished man suffering from pain in the right side. The abdomen was not distended; there was no marked prominence, œdema, or obliteration of the intercostal spaces. The liver dulness began at the sixth rib in the nipple line, at the eighth rib in the mid-axillary line, and at the ninth rib in the scapular line; it was continued downwards two inches below the costal margin. The edge of the liver could be felt mid-way between the costal margin and the umbilicus. Considerable tenderness was felt over the hepatic area, especially just below the ribs. The spleen was enlarged; its edge could be felt below the border of the ribs. Nothing else abnormal was detected in the abdomen. The patient had slight diarrhœa; the bowels were opened four times in the first twenty-four hours, the stools being clay-coloured, but without blood or mucus. The urine was of specific gravity 1026 and contained no albumin or sugar, but a quantity of bile pigment. The temperature was high and remittent, reaching 103° F. The lungs were clear, except at the right base behind, where there was some impairment of resonance; slight feebleness of the breath sounds was noted, and vocal resonance and vocal fremitus were diminished. No adventitious sounds were audible. There was no difference in the measurements of the two sides of the chest. The heart was normal. No nervous symptoms were observed. Two days after admission an exploring needle was inserted into the liver directly backwards through the eighth intercostal space; a small quantity of dark-red, rather offensive pus was withdrawn, showing under the microscope abundant blood and pus cells, degenerated liver tissue, and numerous streptococci, but no amœba coli was seen. In a few days the urine became free from bile, and the stools regained their normal colour. Eleven days after admission Mr. Johnson Smith resected two inches of the eighth rib immediately in front of the anterior axillary line. The layers of the pleura were not adherent, and as the pus showed the presence of septic organisms, in addition to being offensive, these were stitched together to shut off the pleural cavity. Three days later an incision was made into the liver, and a considerable quantity (about one pint) of blood-stained pus was evacuated; it had a slightly fæcal odour and was streaked with blood and bile. Repeated examinations failed to reveal any amœbæ. The abscess cavity was a large one and had a ragged wall. The cavity was washed out once daily with a 1 in 60 carbolic solution and very rapidly closed. In two days the temperature became normal. A fortnight after the operation an alarming gush of blood from the interior of the cavity occurred while the wound was being syringed, but the hæmorrhage was soon controlled by plugging with gauze. With this exception convalescence was uninterrupted, and the patient was discharged recovered.

CASE 2.—A man aged thirty-four was admitted to the Seamen's Hospital, Greenwich, on Oct. 21st, 1895. There was a slight family history of phthisis. He had had malaria and syphilis, but otherwise he had always been strong and healthy. There was a very inconclusive history of diarrhœa. The patient first noticed pain in his stomach one month before admission, while sailing home from Odessa; the pain was of a sharp, shooting character, radiating between the shoulders, and was so severe as to prevent him from sleeping at night. He first observed a swelling over the stomach seventeen days before admission, and it had slowly increased in size. No history of colic or of jaundice was elicited. The bowels were very constipated. He had lost 2 st. in weight during the previous two months. On his admission the abdomen was found to be rather distended, particularly at its upper part. There was no œdema, and no enlarged veins were visible. There was a globular swelling lying very nearly in the middle line, immediately below the ensiform cartilage, its lower border being at the level of the umbilicus. Laterally the swelling approached close to the costal margin on each side, but especially to the right; but even here a finger could be laid between the margin of the swelling and the edge of the ribs when a deep inspiration was taken. The swelling measured eleven inches and a half transversely and six inches and a half from above downwards. It did not move perceptibly on respiration. It was rather fixed, and its right border either was connected with, or was in very close proximity to, the liver. There was no connexion with the right kidney. In consistence the mass was tense and elastic, fluctuation was obtainable, and the percussion note was dull. There was no fluid thrill, and there was no reddening of the skin. The liver dulness began at the sixth rib in the nipple line, and at the eighth rib in the mid-axillary line, and was continuous with that obtained over the swelling. The edge could not be felt in the axillary region, while anteriorly to this the swelling interfered with accurate palpation. There was no enlargement of the spleen. The bowels were constipated. The urine, which was normal in quantity and of specific gravity 1008, contained no albumin or sugar and no pus or blood. The patient's appetite was fair, but he was slightly emaciated. In regard to the lungs nothing abnormal could be detected save a little emphysema. As for the heart the area of dulness was obliterated, the apex was normally placed, and the sounds were healthy. The patient had an anæmic, sallow complexion and an anxious expression. There was no œdema, nor were there any obvious nervous symptoms. Three days after admission Mr. Johnson Smith incised the abdominal swelling, and a large quantity of pus escaped; the pus was of a dark-red colour, containing abundant pus and blood cells, but no amœbæ were found. The temperature, which had previously been slightly raised, fell to normal after the operation, and the patient made an uninterrupted recovery.

BRANCH SEAMEN'S HOSPITAL, ROYAL ALBERT DOCK.

TWO CASES OF HEPATIC ABSCESS; OPERATION; RECOVERY.

(Under the care of Dr. PATRICK MANSON and Mr. W. JOHNSON SMITH.)

WE bring before our readers in the account of two cases treated at the Seamen's Hospital two methods of operation for hepatic abscess. The following cases present two other

methods, which were also followed by recovery of the patients. The first of these patients was operated on by Dr. Manson's method, the insertion of a drainage-tube through a large-sized cannula after tapping the abscess. In the second case peritoneal adhesions did not cover the whole surface of the abscess, and the incision opened the peritoneal cavity in the lower part. Hence special precautions were required, which are described in the account of the case. For the notes of Case 1 we are indebted to Dr. J. Rust, senior resident medical officer.

CASE 1.—A man aged twenty-six years, a native of Bombay, was admitted to the hospital on April 29th, 1895. He had been ill for fifteen or sixteen days, suffering from diarrhœa, and the motions sometimes contained blood. He complained of pain in the right hypochondrium and in the right shoulder. After admission the bowels were opened three times in twelve hours; the motions were dysenteric. Amœbæ coli were present in the fæces. The liver was extremely tender on pressure on the epigastrium and also posteriorly, but the liver dulness was not increased in the epigastrium or right nipple line. Posteriorly, however, a dull percussion note was obtained from the angle of the right scapula downwards. Over the dull area the breath sounds were very distant, and vocal resonance was diminished. The spleen was not enlarged. The urine was normal. The other organs were likewise normal. An attack of bronchitis continued from May 2nd till the 10th. On that date there was a distinct bulging over the liver, this organ being enlarged in the epigastrium and extending two inches below the costal margin in the right nipple line. The patient had no rigors or night sweats. On the 13th an aspirating needle, introduced in the eighth interspace in the right anterior axillary line, withdrew one ounce of liver pus. This pus did not contain amœbæ. On the 16th part of the seventh right rib between the nipple and anterior axillary lines was excised. A trocar was pushed into the abscess, and a large drainage-tube was inserted into it. About eighteen ounces of liver pus escaped. On the 23rd there was considerable retention of pus; a longer drainage-tube was inserted. On June 1st there had been a slight rise of temperature during the previous two days. Amœbæ coli were found in the discharge from the liver. The dysentery continued. On the 25th the diarrhœa had ceased. On July 15th the discharge had gradually diminished in amount; it still contained amœbæ. The patient had gained flesh considerably. On Aug. 23rd the sinus was washed out with a solution of sulphate of quinine (1 in 1000). The sinus was four and a half inches long. On Sept. 10th the drainage-tube was removed, and the sinus was washed out with a solution of zinc chloride. On the 17th the opening had closed, and on the 20th the patient was well. He was transferred to the Seamen's Hospital, Greenwich, for a few days, and was discharged recovered from there on the 24th.

CASE 2 (under the care of Dr. Tom R. Taylor, whilst acting as visiting surgeon to the hospital in the autumn of 1895).—A native of Bombay was admitted to the hospital on Aug. 28th, 1895. He had been suffering from loss of flesh and general malaise for eight months. His illness began with pain in the sixth right interspace. There was no history of dysentery. Upon examination the chest was found to be normal. Liver dulness extended from the fifth rib in the middle line, the fifth rib in the axilla, and the eighth rib behind down to the costal margin. Towards the middle line it extended down to a rounded tumour situated in the epigastrium. The swelling reached down to about two inches above the umbilicus and was so situated that two and a half inches of its transverse diameter lay on the right and one and a half inches on the left of the middle line. It was elastic and painful on pressure, and the skin over it was thin and discoloured. On Aug. 29th the following operation was performed. A vertical incision was made over the centre of the tumour, which was exceedingly tough and made up of indurated and infiltrated muscular tissue. The lower part of the wound opened up the peritoneal cavity. This opening was carefully packed with a carbolic compress. Upon digital examination a sinus was found reaching down into a large cavity in the liver. Upon dilatation there was a gush of grumous pus. On the left side the liver was firmly adherent, but it was found necessary to attach the right side of the opening into the liver to the edge of the parietal wound by a suture. The pus evacuated amounted to about twenty ounces and came away very freely. After evacuation the cavity was wiped out with a carbolic plug on a long sponge-holder. No washing out was attempted. Eight inches of a large sized drainage-tube were then inserted, and the opening was carefully packed round. Sutures were inserted into the peritoneum, and the lower part of the wound was closed. The upper part through the swelling looked so unhealthy that it was considered advisable to pack it with iodoform gauze. On the 30th the temperature rose to 99·8° F., but fell again after dressing. It rose again on the 31st, but from that date continued normal. On Sept. 13th there was no discharge, and the drainage-tube was removed. This was followed by no rise of temperature. On the 21st the patient, who had been steadily gaining flesh after the operation, was transferred as a convalescent to Greenwich. The wound had almost, but not quite, granulated over. He was discharged recovered from Greenwich on Oct. 2nd.

BRISTOL ROYAL INFIRMARY.

RESECTION OF INTESTINE FOR TUMOUR WITH INTUSSUSCEPTION BY MEANS OF MURPHY'S BUTTON.

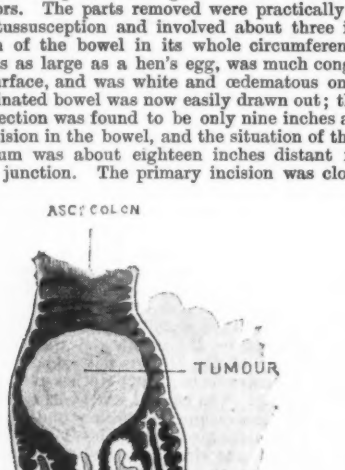
(Under the care of Mr. J. GREIG SMITH.)

SIMPLE tumours of the bowel very rarely cause intestinal obstruction, either as a primary result of their presence or secondarily to an induced intussusception. "Tubular adenomata and papillomata are the most common simple tumours of the intestines, but if we exclude those growing in the rectum they are extremely rare. Fibromata, springing from the submucous tissue, fibro-myomata, lipomata, and angeiomata have also been described, but they are merely pathological curiosities."[1] This is one of those cases of resection in which the rapidity of operation bears such an important influence on the result, and there can be little doubt that the use of the Murphy button helped greatly in the success, the account of which we are pleased to place before our readers. The case is worthy of record from the interest of the pathological condition and the gratifying progress of the patient after operation. For the notes of the case we are indebted to Mr. T. Carwardine, house surgeon.

An emaciated woman aged thirty-one years was admitted to the Bristol Royal Infirmary on Oct. 30th last under the care of Mr. Greig Smith. She complained of sickness and constipation, together with severe griping pains in the abdomen. She was very collapsed; the eyes were dull, the tongue was dry and furred, and she lay on her side vomiting repeatedly, whilst every few minutes she moaned on account of abdominal pain. The abdomen was tense, distended, and tympanitic, with prominent umbilicus. Palpation brought on visible peristalsis accompanied by pain, large distended coils of gut appearing transversely across the lower part of the abdomen. The gurgling peristaltic wave passed from left to right, appearing to cease at the right iliac fossa, where a tender intra-abdominal mass could be felt. Constipation was absolute and enemata were of no avail. She passed no blood or mucus per anum, and her urine, though small in quantity, was normal in reaction. She stated that two years previously she had had severe bearing-down pains in the lower part of the abdomen, which usually began in the night, lasted for about twenty-four hours, and recurred about once a fortnight, each attack being associated with sickness. Later the attacks became more frequent and severe, and during last midsummer she had placed herself under medical care for some ten weeks, from which she derived temporary benefit. At the end of September she became worse; the pains increased in severity and recurred every two or three minutes, and she needed an enema every day. The pains were always accompanied by nausea and usually by vomiting. There was nothing striking in her family or previous history, except that as a girl she was subject to constipation and often went a week without defecating. On admission to the infirmary, brandy and gastric sedatives were given and the vomiting became less, but collapse increased alarmingly for a time, and it was feared that she would not be able to undergo an operation. On Nov. 1st she had rallied somewhat, and the operation was performed under forty minutes' anæsthesia with chloroform. The abdominal cavity was entered by an incision on the right side, starting above the anterior superior iliac spine and following the direction of the fibres of the external oblique muscle upwards and backwards for three inches. An intussusception of the small into the large bowel was at once discovered. The intussusception formed a mass about as large as the

[1] Erichsen: Science and Art of Surgery, vol. ii., 1895, p. 904.

two clenched fists placed end to end, and was firmly fixed to the posterior abdominal wall by the mesentery of the ascending colon. Reduction was not difficult when a start had been made, and an unknown but considerable length of small bowel was pulled out and set free in the cavity. Finally, a little effort was wanted to pull what seemed to be a lump through the ileo-cæcal valve. This could be delivered through the parietal wound and on examination proved to be another intussusception at the end of the ileum with what seemed to be a tumour at its apex. This intussusception could not be reduced, and as it seemed necessary to resect the tumour no prolonged efforts were made to reduce it. The receiving bowel, therefore, was incised longitudinally, and the tumour was pulled through the incision and removed with scissors. The parts removed were practically the apex of the intussusception and involved about three inches of the length of the bowel in its whole circumference. The growth was as large as a hen's egg, was much congested on its free surface, and was white and œdematous on section. The invaginated bowel was now easily drawn out; the actual seat of resection was found to be only nine inches above the seat of incision in the bowel, and the situation of the growth in the ileum was about eighteen inches distant from the ileo-cæcal junction. The primary incision was closed by a



double continuous Dupuytren's suture. The divided ends of intestine left by the removal of the growth were joined by means of a large Murphy's button. The large size of button was used, even though it was in the small intestine, because the gut was so distended and hypertrophied that the small button would have been inefficient, and also because the ileo-cæcal valve was already so much dilated that it was not likely to prevent its subsequent passage. The operation was concluded by cleansing and returning the gut and suturing the parietal wound in the ordinary way. As regards the subsequent progress of the patient, no vomiting occurred till 8 P.M., when it persisted till the early morning. Nutrient enemata were given. She had no sleep during the night owing to abdominal pain, which was only partially relieved by two hypodermic injections of morphine. On Nov. 2nd the sickness was less, though she vomited several times during the night. There was an occasional intestinal cramp, which ceased towards the right iliac region. On the 3rd the patient had occasional hiccough, but was much more comfortable, having passed flatus freely. The abdomen was somewhat distended, but not tense. Painful peristalsis was still visible. The temperature had now reached its highest point—viz., 101° F. On the 4th vomiting had ceased, much flatus had been passed, and the abdomen was no longer distended. She was given sulphate of magnesia in drachm doses twice daily to keep the bowels acting. She continued to make progress. On the 7th the bowels were opened, and she had a good appetite. She got up on the 25th for two hours. On the 30th she passed four motions. With the last of these she had very acute pain in the "lower part of her bowels" for about five minutes and perspired profusely. The Murphy's button was then expelled with a little blood and a loose motion. The button was fully closed, blackened, and surrounded by unaltered silk thread, but there was no intestinal slough. The patient was discharged recovered on Dec. 2nd, a month after the operation.

Microscopically the tumour presented the characters of a fibro-myxoma with numerous well-formed vessels traversing its substance.

Medical Societies.

EPIDEMIOLOGICAL SOCIETY.

Diphtheria in Older and Newer Bristol.

A MEETING of this society was held on Dec. 13th, Mr. SHIRLEY F. MURPHY, President, being in the chair.

Dr. WALTER DOWSON read a paper on Diphtheria in Older and Newer Bristol, the first comprising the registration sub-districts of St. Mary Redcliffe, the Castle precincts, St. Paul's, St. James's, and St. Augustine's, being the Bristol of the Charter of Henry VIII.; and newer Bristol, comprising those of Clifton, Bedminster, Westbury, Ashley, and St. Philip's, added to the borough in 1835. In 1891 the population of the whole was 221,000, and of the two sections 55,000 and 166,000 respectively. To these numbers might be added a population of over 60,000 in districts such as Stapleton, Horfield, and St. George's, outside the city boundaries, but in brick and mortar continuity with Newer Bristol, with which they had many conditions in common, and which, forming an organic whole, practically made up a Greater Bristol, with 280,000 to 300,000 inhabitants. During the five years 1890–94 the cases of diphtheria notified were 501, with 162 deaths; none were removed to hospital, nor was there any disinfection of the excreta. The suggestions of Dr. Newsholme and Dr. Sidney Davies at the Newcastle meeting of the British Medical Association in 1893 as to the influence of the ventilation or non-ventilation of sewers by street grids, or of the defective construction of sewers and drains in newly-built districts, had led Dr. Dowson to turn his attention to the possible influence of those factors in the causation of diphtheria in Bristol, as well as to the agency of personal contagion, as in schools, to which Dr. Newsholme and Mr. Shirley Murphy attached considerable importance. The sewers of Bristol were tide-locked twice in every twenty-four hours, the outfalls being protected by tidal valves. Storm waters were admitted by road gulleys, but there was absolutely no provision for ventilation, and the manholes were air-tight. In by far the greatest number of the new streets the drains were laid under the houses without concrete or disconnexion from the sewer, and the hopper closets in the backyards were without flushing apparatus, so that, with the very defective construction of many of the drains, the escape of sewer-gas in and around the dwellings was inevitable. The character of the drainwork might be judged from the fact that during these five years the drains of over 9000, or one-fourth, of the 37,000 houses in Bristol had to be wholly or partly reconstructed, and three-fourths of these were in the newer districts. He might call these 9000 "sewer air," and the other 28,000 "non-sewer air" houses. The 501 cases of diphtheria occurred in 437 houses, of which 125, or 28·6 per cent., presented sanitary defects, and 71 were "sewer air" houses. Thus the percentage of "sewer air" houses attacked was 8, and of "non-sewer air" houses 13 (!). In times of heavy rainfall the low-lying districts were for many consecutive days flooded to a depth of several feet, and the sewage, forcing w.c.'s, traps, and gulleys, rose into the houses, leaving when it subsided a deposit of foul mud. This happened in 1889, and again in 1893, when it was followed by a sudden outburst of diphtheria. Thus, in the latter year 22 of the 27 cases occurring during the six weeks following the flood were in the districts affected; this was but natural, yet he did not think that on the whole these special outbreaks could be held to outweigh the absence of evidence of sewer air playing any appreciable part at other times and places. The districts of Newer Bristol in which

the incidence of diphtheria was heaviest were those which were continuous with the most populous outlying rural districts, rural in name only, but really integral parts of Greater Bristol—districts where, since they had adopted notification, diphtheria was found to be very rife, and which did not possess means for disinfection or exercise any stringent sanitary administration.

BRITISH GYNÆCOLOGICAL SOCIETY.

Exhibition of Specimens.—Utero-ovarian Irritation as a Factor in the Causation of Rheumatoid Arthritis, and the Special Treatment necessitated thereby.

A MEETING of this society took place on Dec. 12th, 1895, Dr. CLEMENT GODSON, President, being in the chair.

Dr. SMYLY (Dublin) showed the following specimens:—(1) Pyosalpinx removed by Vaginal Colporrhaphy; (2) Three Myomatous Uteri removed per vaginam by Morcellement; and (3) Ectopic Gestation operated on at Term; all the patients recovered.—Dr. BANTOCK hoped that Dr. Smyly did not advocate colpotomy for all cases of pyosalpinx, for in many it would be almost impossible to get good results by that method. In support of this statement he related cases of pyosalpinx operated on by laparotomy, where the complications could not have been dealt with by colpotomy. With regard to the vaginal operation for fibroids he did not think it was so good as the abdominal. He considered it most important that the integrity of the pelvic floor should be preserved, even if the uterus were represented only by the cervix. Compared to this the prolongation of convalescence by one or two weeks was of little importance.—Dr. HEYWOOD SMITH thought they should keep an open mind on the subject of the relative merits of the vaginal and abdominal operations; the former were being done extensively on the Continent and in America, and the results were so far very good.—Dr. ROUTH considered that the proper treatment of adherent pyosalpinx was aspiration per vaginam and injection of iodine. Similarly, for fibroids, neither the uterus nor the ovaries should be removed, but the uterine arteries should be tied, as was done in America.—Dr. SMYLY, in reply, said he thought it was wrong to perform a new operation unless it seemed to be the best one for the patient, and this rule had guided him in all his cases. Many cases of pyosalpinx were rendered unsuitable for colpotomy by the fact that the uterus could not be pulled down, for this was an essential point in the performance of the operation. Briefly, the principal advantages of vaginal over abdominal operations were: firstly, the risk of hernia was obviated; secondly, convalescence was shorter; and thirdly, and chiefly, the shock of operation was much less, and the mortality was proportionately diminished.

Mr. W. ARMSTRONG, J.P., of Buxton, read a paper on Utero-Ovarian Irritation as a Factor in the Causation of Rheumatoid Arthritis, and the Special Treatment necessitated thereby.—The PRESIDENT thanked Mr. Armstrong in the name of the society for his valuable and interesting paper.—Dr. LEITH NAPIER said that Dr. Halliday Croom had pointed out some years ago the association of inherited rheumatism with a form of dysmenorrhœa which he was the first to designate as the rheumatic type. It was possible for rheumatism to remain long latent and to show itself when uterine disturbance occurred, as in a case he had seen where the patient developed an attack of acute rheumatism two weeks after her first confinement and again three weeks after the second confinement, whilst in the interval she remained free.—Dr. ELDER thought that Mr. Armstrong's interesting paper was not conclusive, because all the facts mentioned therein were consistent with the view that rheumatoid arthritis was neither the cause nor the effect of utero-ovarian disturbance, but that both were alike the effects of a common cause.—Dr. ROUTH observed that many years ago Mr. Druitt had read a paper before the Medical Society of London showing that many uterine troubles remained intractable until they were treated as of rheumatic origin.—Dr. FORTESCUE FOX said his experience agreed closely with that of Mr. Armstrong, and he had been led to very similar results; but he felt inclined, following Dr. W. M. Ord, to lay more stress on the causal influence of the nervous system, and he was glad to note that Mr. Armstrong gave considerable importance to remedies directed to that system. Other factors entered into the etiology of rheumatoid arthritis, of which perhaps the most important was climate. Inherited tuberculosis, and shock occurring at the menopause also played a part. He agreed with Mr. Armstrong that very hot baths were not so effectual as cooler ones.—Mr. ARMSTRONG briefly replied.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

Medical Aid Societies.—Prevention of Phthisis.

A MEETING of this society was held on Dec. 18th, 1895, Dr. MUTCH, President, being in the chair.

Dr. COULBY called attention to the abuses of certain so-called Medical Aid Societies, and it was decided to discuss the subject at the next meeting of the society.

Dr. C. WILLS, medical officer of health of the Newark, Southwell, Worksop, and Mansfield district councils, read a paper on the Prevention of Phthisis. It was illustrated with fifty-five lantern slides, many of which were prepared for the occasion. The causes of phthisis assigned by eminent authorities on the subject, such as the late Dr. Parker, the late Sir G. Buchanan, Dr. Ogle, Dr. Sims Woodhead, Dr. Martin, Dr. Squire, Dr. Cornet, Professor Bang, and M. Nocard, were enumerated in their order; and it was pointed out that dusty air with damp subsoil appeared to be the great cause of phthisis in man and easily accounted for its presence in cows, which were often kept in foul, unventilated cowsheds, whence the disease was transferred to children. These causes explained infection carried by dusty air containing the bacillus in close, unventilated rooms and would account for the disease prevailing in those engaged in the dusty occupations of steel-grinding and pottery manufacture, and among Cornish miners, as well as its rarity among those engaged in occupations in pure air, on the sea or land, or living in mountainous districts, where there is comparatively little dust or stagnant subsoil water. Inheritance, as seen by the light of Koch's experiments with guinea-pigs and those of Professor Bang with the calves of tuberculous cows, as related to the Budapest Congress, appeared to mean inheritance of dusty homes, dusty clothing, infected handkerchiefs, dusty bedding, and infected mother's milk. The remarkable example of the Oldham Medical Society was fully quoted to indicate the lines upon which notification was desirable. The treatment of incipient cases in the mountain regions of Germany, Switzerland, and America was illustrated, and the results collected by Dr. Williams and Dr. Tonclear were shown on the screen. Illustrations of grates for ventilating and warming were exhibited, and the method of extracting foul air, introduced by Buchan of Glasgow, was shown. The better ventilation of factories, workshops, schools, and cowhouses was insisted on as being very important.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Pathology of Diphtheria.—Exhibition of Cases and Specimens.

A PATHOLOGICAL meeting of this society was held on Dec. 3rd, Mr. MAYO ROBSON being in the chair.

Dr. TREVELYAN read a paper on the Pathology of Diphtheria. It was chiefly based upon the minute morbid anatomy of a case of diphtheria and upon the examination of the diphtheria culture boxes under the scheme adopted by the Leeds Corporation at the instance of Dr. Spottiswoode Cameron. The case was of some interest, as death occurred from cardiac paralysis, and an intense degenerative myocarditis was found. There was evidence of a well-marked tubulo-glomerular nephritis, and during life albuminuria had been persistently present. The local diphtheritic lesion was first described, then the changes in the various organs and tissues were explained, and finally some points in the bacteriology. The question as to whether the serum could in any way be made responsible for some of the visceral lesions was discussed, the opinion being expressed that there was no evidence in support of that view. The bacillus itself as well as its staining and cultivation were briefly described. The question as to whether dahlia methyl-green produced a characteristic staining of the bacillus was discussed. The method of preserving cylinders of nutrient medium with growth on them in

formol chambers was demonstrated. Finally the light that bacteriology had thrown on diphtheria was referred to. — Mr. HAROLD WAGER made some remarks on the structure of bacteria with reference to their recognition and morphological examination, and Dr. CAMPBELL, Dr. BARRS, and Mr. LITTLEWOOD joined in the discussion.— In reply, Dr. TREVELYAN said that he doubted whether much reliance could always be placed upon the mere morphological appearances. Only the material from doubtful cases was submitted to him for examination. He did not think that the serum could have any baneful effects. The absence of general symptoms in cases of membranous rhinitis due to the diphtheria bacillus was now beyond dispute.

Dr. TREVELYAN showed a series of coloured drawings illustrating the Minute Morbid Anatomy of Infantile Paralysis, and (for Mr. BOLLANS) selected microscopic sections from various Human Thyroid Glands.

Dr. HELLIER showed a Uterus removed by Vaginal Hysterectomy from a patient aged fifty-two years for malignant disease of the fundus. The diagnosis was made on clinical grounds, in spite of the fact that the microscopic examination of fragments removed by preliminary curetting had failed to give evidence of malignant disease. The growth was proved to be sarcomatous. The patient made a good recovery.— The PRESIDENT and Dr. BRAITHWAITE described cases illustrating the difficulty of diagnosing malignant disease of the womb from the microscopic examination of curettings.

Dr. HELLIER also showed a Multilocular Ovarian Cyst, which had contained fifteen pints of fluid, successfully removed from a patient aged fifty-seven years.

Dr. E. W. SELBY showed the Stomach from a patient on whom he had operated for perforating ulcer of that viscus. The patient was doing well, but a second ulcer perforated and led to death from peritonitis.

The PRESIDENT showed (1) a Villous Tumour of the Rectum removed by proctectomy; (2) a large Multilocular Ovarian Cyst; (3) a large Myoma removed by abdominal section, in connexion with which he called attention to the comparative frequency of trouble from myoma after the menopause, and said that the danger was by no means over when the menopause was passed; and (4) a Gall-bladder removed by cholecystectomy.

Mr. SECKER WALKER showed (1) a Sequestrum consisting of three semi-circular canals, the vestibule, and the greater part of the cochlea, which he had removed from the temporal bone of a patient after opening the mastoid for caries—the patient did well; (2) two specimens of Cholesteoma removed from the external auditory meatus; and (3) Cysticercus Cellulosæ, from the conjunctiva of a boy.

PATHOLOGICAL SOCIETY OF MANCHESTER.

Exhibition of Specimens.

A MEETING of this society was held on Dec. 11th, 1895, Dr. H. R. HUTTON, President, being in the chair.

Mr. FRICKE showed the Rectum and Sigmoid Flexure removed from a man aged thirty-five years. The patient had been employed at out-door work up to the morning of his death. He began to vomit at breakfast, was taken to bed, and died about 2 P.M. During the previous year his abdomen had been noticed to grow very large. Post mortem the peritoneal cavity was found to be full of fæces mixed with exudation; the rectum was enormously distended, being at least five inches and a half in diameter, and ascended close to the middle line from the pelvis as far as the left dome of the diaphragm, displacing the heart upwards. At the lower part of the sigmoid flexure there was a perforation of the size of a shilling, with greatly thinned edges and without any signs of inflammation, through which fæces escaped into the peritoneal cavity. The contents of the intestines consisted of softish fæces of slightly greater consistence than cow's dung; there were no hard masses anywhere. There had never been any constipation. There was no trace of organic obstruction, the whole hand being easily passed through the anus into the rectum.

Mr. FRICKE also exhibited the Fractured Vault and Base of the Skull of an epileptic female patient aged thirty-six years. She was 16 st. in weight and 5 ft. 4 in. in height. She fell in a fit down three steps, each six inches high, on to the back of her head, and died immediately afterwards. A fracture was found to start from the upper part of the right lambdoid suture, going downwards and then forwards into the foramen magnum, leaving the latter at the right side of the basillar process and then extending forwards on the same side as far as the pituitary fossa; at this level the fracture went across to the left side through the pituitary fossa and ended in a slight fissure extending slightly backwards on the left side. The body of the sphenoid was completely broken through. Although the skull cap was much thickened, the right lower occipital fossa was very thin.

Mr. FRICKE then brought forward microscopical preparations of an Encapsuled Renal Tumour from a patient aged seventy-two years who had died from heart disease. The sections were diagnosed as angeio-sarcoma.

Dr. WILD showed a Heart of which the Myocardium presented numerous nodules of Cancer; the left ventricle was chiefly involved, and one papillary muscle was deeply infiltrated; the pericardium was only affected where a nodule in the heart muscle reached the surface. Microscopical preparations showed that the nodules had the structure of a squamous epithelioma; typical cell nests were numerous, and the new growth infiltrated the cardiac muscle. There were no cardiac symptoms during life. The specimen was obtained from a man aged forty-three years, who had had his tongue removed for epithelioma nearly four months before his death. Rapid recurrence took place in the cervical glands, which ulcerated deeply and involved the surrounding tissues. Death occurred from exhaustion consequent on septic absorption and inability to take food. The progress of the case was unusually rapid, for, so far as could be ascertained, less than five months had elapsed between the first appearance of disease in the tongue and the occurrence of death. The lungs also presented secondary growths of a similar character to those found in the heart.

Mr. RAY brought forward for Dr. DIXON MANN a specimen, with microscopic sections, of Colloid Cancer of the Lower End of the Œsophagus. Secondary growths were found on the left third rib and in a submaxillary lymphatic gland on the left side. There was also a fibroid stricture of the pylorus.

The following card specimens were exhibited:—

Dr. KELYNACK: Chronic Ulcer of the Stomach from an Elderly Female.

Mr. STOCKS: Large Sarcomatous Growth below the Lower Mandible of a Fowl.

PLYMOUTH MEDICAL SOCIETY.

Exhibition of Case and Specimens.

A CLINICAL meeting of this society was held on Dec. 18th.

Mr. WEBBER showed a male patient aged sixteen with an Impetiginous (?) Eruption on the back of the left wrist noticed three weeks previously. There was no history of local infection; improvement followed the use of a dilute nitrate of mercury and resorcin ointment.

Mr. FOX showed specimens from a case of Multiple Sarcoma. The patient, a girl sixteen years of age, suddenly became diplopic in May, 1895, and in June developed "lumps" in both mammæ, pains across the shoulders and in the right knee, and her legs became weaker until one morning she was unable to stand. There was a history of fright, but no previous illness. Ultimately she was unable to move her legs, though they responded to reflex stimulation; sensation was impaired, and there was incontinence of urine. Both breasts were about equally enlarged, extremely hard and nodular; the lymph glands of the axillæ and upper cervical regions were enlarged, and in the epigastrium was a button-like nodule adherent to the thinned red skin above it. In August an elastic swelling appeared above the left zygoma, and the urine was found to be alkaline. On Sept. 1st the left upper cervical glands became indurated; several hard movable nodules appeared in the abdominal walls, and headache was complained of, followed on Sept. 9th by continual vomiting. On Oct. 12th there was marked deafness, and the tongue deviated to the right; the temperature was generally raised throughout, till death occurred on Dec. 13th. At the necropsy sarcoma was found generally throughout the body; the peritoneum and mesenteric glands were largely affected; both ovaries and kidneys contained numerous new growths, calcareous in the former, but cystic in the latter; one growth was found in each lobe of the liver, but none in the spleen or lungs. The mammæ consisted almost entirely of new growths; the spinal cord was not affected; the brain was not examined.

Mr. RIDER showed a Cyst removed from the Right Occipital Region of a girl aged six years. At birth there was a swelling in this situation, which became tense on the child laughing or crying. Latterly the mother noticed that the swelling did not enlarge as previously, but could not fix the date. The tumour on incision yielded clear fluid; the cavity was lined with a perfectly smooth membrane, and had a small process or neck at one part. It was regarded as an obliterated lateral occipital meningocele. Mr. Rider also showed a leg removed by amputation through the middle third of the thigh for extensive Tertiary Syphilitic Ulceration, exposing the tibia and fibula, a large vessel, and several cutaneous nerves. The patient, who was a woman aged thirty-three years, had been an inmate of the Lock wards of the Royal Albert Hospital, Devonport, before the repeal of the Contagious Diseases Acts. For the last two years the leg had given great trouble and caused intense agony when dressed, hence the operation.

The following office-bearers have been elected for 1896:—President: C. A. Hingston, M.D. Vice-Presidents: E. M. Russel-Rendle, C. Whipple, W. Square, and T. Leah. Treasurer: J. Elliot Square. Librarian: C. E. Russel-Rendle. Secretary: Reginald H. Lucy.

Reviews and Notices of Books.

Traité de Médecine et de Thérapeutique. Publié sous la direction de MM. P. BROUARDEL, A. GILBERT, et J. GIRODE. Tome premier: Maladies Microbiennes. Paris: J. B. Baillière et Fils. 1895. (*Treatise on Medicine and Therapeutics.* Edited by MM. BROUARDEL, GILBERT, and GIRODE. Vol. I., Microbic Diseases. Paris: J. B. Baillière and Sons. 1895.)

THE tide of comprehensive systems of medicine is flowing apace. Following close in the wake of the "Treatise of Medicine," edited by Charcot, Bouchard, and Brissaud, we have a new enterprise, which is to extend to ten volumes, and of which the list of contributors is not yet complete. Of the names of those already selected some are well known, others are those of writers unknown to fame. The style and character of the work, of which the chief editor is Dr. Brouardel, Dean of the Paris Faculty of Medicine, may be fairly estimated from the first volume already issued. It is plainly intended to present the very latest developments of medical science, and, if anything, it may possibly err therein by a too facile adoption of doctrines which have not received general sanction. The fact, for instance, that the term "maladies microbiennes" is employed as an alternative to the less debatable phrase, "specific infectious diseases," shows this. It also prepares the reader what to expect in the treatment of the subject, as the opening sentences of the volume show. "The medicine of to-day has its fundamental characteristic in the idea of causes. Now, organised and parasitic agents take the chief place amongst the causes of diseases; they constitute, as it were, a vital and stable etiology, which furnishes a firm basis for our conception of disease. This morbid group comprises three great divisions:—1. Microbic diseases. 2. Diseases provoked by fungi. 3. Diseases due to animal parasites." Thus, the recognition of parasitism in its widest extent is, and, we believe, correctly, regarded as the most important factor in disease. It is a striking testimony to the all-satisfying character of this view of the nature of infective disease that, although the relationship to microbic invasion has in the majority of instances not advanced beyond the stage of probability founded on analogy, it is assumed that this is the sole explanation for the occurrence of such maladies. So much is this the case that the phrase "germ theory" has practically fallen into disuse, for although it is still more or less a matter of hypothesis it is tacitly accepted as a fact. As a further indication of the bent of opinion on this matter, it is of much interest to find in this treatise separate sections devoted to such subjects as "Streptococcie," "Staphylococcie," "Pneumococcie," and "Colibacillose"—terms which are practically new to medical literature, and for which there is, so far as we are aware, no English equivalent, yet which denote with strict logical accuracy the outcome of modern bacteriological research. Thus, to the article "Streptococcie," by Dr. F. Widal, is appended an account of Facial Erysipelas, the introductory pages of the article being devoted to a description of the varied forms of septic disease to which this "common saprophyte of our cutaneous surface, and especially of our natural cavities," may occasionally give rise. "Of all saprophytes," says Dr. Widal, "capable of acquiring pathogenic properties, the most interesting, by reason of its ubiquity and the variety of the lesions it induces, is this streptococcus." Similarly, in the article "Staphylococcie," by Dr. J. Courmont, it is pointed out what an extensive part it plays in many septic inflammatory disorders, and the same holds of the pneumococcus, the author, Dr. L. Landouzy, stating truly that for the first time in a work of descriptive pathology is the subject of "Pneumococcie" dealt with apart. It has not, however, been apparently deemed advisable to append to this article a description of pneumonia, although in strictness that disease should be as much entitled to this place as erysipelas is in relation to streptococcal infections.

Having thus indicated the standpoint assumed by the editors of this new treatise, we may briefly advert to the articles contained in this first volume, premising that they are for the most part scholarly and profound. A very clear and interesting account of the general subject of microbic diseases is given by Dr. J. Girode, which, like all the writings, is thoroughly up to date. Variola is treated by Dr. B. Auché in an article of considerable merit—of especial value for the fulness with which the complications and sequelæ of this disease are dealt with. Vaccinia is discussed by Dr. H. Surment, who, it may be remarked, ranges himself with those who are not convinced of the unity between variola and vaccinia having been established. Varicella is contributed by Dr. L. Galliard. Scarlet Fever is treated by Dr. R. Wurtz, who, after noticing the various attempts made to associate particular forms of streptococci with this disease, is forced to the conclusion that, so far, nothing is known concerning the actual cause of scarlet fever. "Its pathogenic agent, like that of measles and variola, has yet to be found." The article on Measles is by Dr. Grancher, the well-known physician to the Paris Hôpital des Enfants Malades, whilst Dr. A. Netter writes on Rubeola, of which he says that it is perfectly distinct from measles on the one hand and roseola on the other, affections with which it is sometimes erroneously confounded. He remarks that this is an affection apparently more common in Germany, England, and "even in Switzerland and Belgium," than in France. Its highly contagious character is dwelt on, and it is averred that, "like measles, rubeola may be transmitted by a patient in the stage of incubation." The introduction of an article upon Miliary Fever, or the Sweating Sickness, by Dr. L. Thoinot, has more immediate interest for French physicians than for us in England at the present day, although, according to epidemiological history, this singular plague first appeared in these islands in the fifteenth century, and disappeared about the middle of the sixteenth century. A map showing the relative distribution of the "suette miliare" in France in the nineteenth century shows that it has prevailed in the majority of the departments, especially in the north and west, but it is happily not now so virulent in its effects as old records prove it to have been formerly. On the other hand, even so recently as 1887 an outbreak at Moulismes (canton of Montmorillon) yielded no less a death-rate than 35 per cent. Dr. A. Netter writes also on Influenza, of which a very

summary historical account is given. Its contagious character is held to be proved by many concordant circumstances, and contagion alone is regarded as the efficient cause of its diffusion. A full notice is given of bacteriological studies, and the opinion is expressed that in Pfeiffer's bacillus the specific microbe has been made known. The same author writes on Dengue; whilst the articles on Whooping-cough and on Mumps are contributed by Drs. A. Legroux and L. Hudelo. Diphtheria, defined as "an infectious, contagious disease caused by a specific micro-organism, the bacillus of Löffler," is described by Drs. Grancher and Boulloche. It is interesting to note that the paralyses are given a prominent place in symptomatology, and that the subject of serum-therapeutics is referred to in most hopeful terms, the authors (writing in November, 1894) stating that its introduction had so far reduced mortality from "croup" by one-half, and from "angina" by two-thirds. Then follow the articles descriptive of the share taken in disease by the streptococcus, staphylococcus, pneumococcus, referred to above. "Colibacillose" is the title of an article by Dr. A. Gilbert, which deals with the pathogenic manifestations of the bacterium coli commune. This "germ, often considered to be harmless or even useful, is really a vigilant enemy concealed within the organism and ready to profit by its weakness." After death, too, it rapidly invades the viscera, and is one of the chief agents in cadaveric decomposition. The volume closes with a classical article upon Typhoid Fever by Drs. Brouardel and Thoinot, which is notable for the systematic manner in which each part of the subject is dealt with, for the knowledge of its extensive literature evinced by the authors,[1] and the thoroughly scientific treatment of the subject. We anticipate from the style and character of this volume that the treatise, when completed, will take a good position amongst works of its class.

Relations of Diseases of the Eye to General Diseases. By MAX KNIES, M.D., Professor Extraordinary at the University of Freiburg. Edited by HENRY D. NOYES, M.D., Professor of Ophthalmology and Otology in Bellevue Medical College, New York. pp. 467. London: Baillière, Tindall, and Cox. 1895. Price 18*s*.

THE importance of a thorough knowledge of medicine to the ophthalmic surgeon is indisputable; indeed, we may go so far as to say that no one should presume to practise ophthalmic surgery who has not prepared himself for his calling by familiarising himself with every other branch of the medical art. There is scarcely a single disease of the general system that may not implicate vision; scarcely an affection of the eye that is not referable to some disorder of the system at large and that is not to be treated by remedies addressed to that state as well as to itself as an organ of special endowments. The eye is apt to be troubled in the acute infectious diseases; in gout, in syphilis, rheumatism, and scrofula; in affections of the heart and bloodvessels of the lungs, alimentary canal, nervous system, urinary and generative organs; in pregnancy, at birth, and in old age. A knowledge of these normal and abnormal states, and of many particular diseases, such as leprosy, goitre, and helminthiasis, should be and is possessed by every competent ophthalmologist. There are, however, few treatises that deal with the relations between the eye and general diseases, though there are several that deal with the various manifestations in the eye of particular diseases, as syphilis and nervous affections. There was therefore room for such a treatise as that which has been written by Dr. Knies. The work commences with a short account of the anatomical course of the nerves of the eye, including the optic nerve, which is well, but not too elaborately, worked up to date, and the third, fourth, fifth, sixth, seventh, and sympathetic nerves. It is gratifying to find how much information we have recently obtained in regard to the origin of these various nerves as the result of careful clinical observation, of experiment, and of new and improved methods of microscopical investigation. Thus no less than eight centres or groups of cells presiding over the functions of the third pair of nerves have been established with some approach to accuracy, though of course much still remains to be done. We miss a reference to Stephan Bernheimer's interesting little brochure entitled "Das Wurzelgebiet des Oculo-motorius beim Menschen," though it is possible this may have appeared last year after Dr. Knies had written his treatise. As might be expected, the greater part of the volume is taken up with the description of the effects of lesions of the nervous system on the eye. The remaining chapters are occupied with the relations of the diseases of the eye to diseases of the skin, to diseases of the digestive organs, respiratory organs, urinary organs, sexual organs, to poisons and infectious diseases, and, lastly, to constitutional diseases. Although Dr. Knies has taken infinite pains in working up the literature of each subject and refers to an immense number of cases, of many of which he gives a *résumé*, he is no blind follower of other men's views, but exercises much judgment in drawing conclusions, whilst he is himself an accomplished ophthalmologist and an observer of much originality. We may notice, in passing, that the introduction of the reference in each instance into the text, instead of relegating it to a footnote, is a fault that the author would do well to avoid in the next edition. Such references often take up more than a line and interfere with the comfort of the reader by seriously interfering with the continuity of the text.

Dr. Knies considers that choked disc is by far the most important sign in the diagnosis of a tumour in the brain, and remarks that it usually begins quite suddenly, the papilla sometimes increasing to three times the normal diameter and projecting so far forward that it is not uncommon to find a difference of refraction amounting to four or five dioptres between the apex of the papilla and the general plane of the retina. At first hyperæmic, the papilla becomes pale with sinuous and often enlarged vessels. In one case he noticed several concentric rings around it due to folds of the retina. After a variable length of time the papilla again becomes redder; hæmorrhages appear in it, as well as whitish or yellowish degenerative foci. It then recedes and becomes of a chalky-white colour without visible details on its surface. All this occupies six or eight weeks or more. Various degrees and kinds of impaired vision accompany these changes, such as contraction of the field of vision, scotomata, colour disturbances, and the like, though "the ophthalmoscopic appearances and the disturbances of sight are often grossly disproportionate to one another." Choked disc, he goes on to say, does not occur with equal frequency in tumours of different parts of the brain. It is said to be somewhat less frequent in tumours of the frontal lobes, more frequent in those of the cerebellum. It may also accompany tumours of the spinal cord. Dr. Knies complains that few writers have distinguished between choked disc and choked (obstructive) neuritis. "In very many cases a distinction is not even made between choked disc and neuritis. Thus the English writers often use the term 'optic neuritis' in undoubted cases of choked disc," probably because the two conditions often run into each other. Anatomical examinations in man, he contends, prove indubitably that the choked disc of tumour of the brain begins as a pure œdema of the intra-ocular end of the nerve without any signs of inflammation, but at a

[1] A separate publication, "La Fièvre Typhoïde" (Paris: J. B. Baillière, 1895, price 9 francs), by these writers is an expansion of this article, and is a monograph of real value.

later stage interstitial inflammatory changes may be found, but are sometimes absent in the specimen.

There is a valuable chapter on Hysteria, in which disease affections of the eye are not infrequent symptoms, sometimes presenting themselves in the form of disturbances of vision, sometimes of paralyses and spasms, at other times of disordered sensation and secretion, and at still others with peculiar associated sensations, as coloured hearing—the *audition colorée* of the French writers. Charcot maintained that a characteristic sign of hysteria is the unilateral concentric narrowing of the field of vision, with more or less impairment of central vision and colour perception, but other observers consider that hysterical disorders of vision are always bilateral. Dr. Knies has collected a very considerable number of cases of affections of the eye in hysteria and reports an important case in which there was great impairment of vision without visible ophthalmoscopic lesion; the patient dying from septicæmia after a slight operation, an opportunity was afforded of examining the parts, and Professor Leber found very distinct objective changes in the optic nerve, atrophic fasciculi being conspicuous. Dr. Knies regards hysterical paralysis and anæsthesia as being essentially peripheral in origin.

The treatise, as a whole, is extremely valuable, since it forms a clear and sound system of classification, so that, in future, cases can be disposed without difficulty under special headings, and the confusion which has hitherto existed will give place to orderly and rational arrangement. The translation is very well executed.

Twentieth Century Practice. Vol. III: *Drug Habits, Occupation Diseases, and Poisons.* Edited by THOMAS L. STEDMAN, M.D., New York City. London: Sampson Low, Marston, and Co. 1895.

IN this (the third) volume the article on Alcoholism and Drug Habits has been placed in the hands of Dr. Norman Kerr. The section on Alcoholism deals exhaustively with the acute and chronic phases of alcoholism, acute alcoholic insanity, and acute alcoholic epilepsy, a condition not always recognised; also with acute alcoholic paralysis. The treatment of alcoholism is lucid and exhaustive. The section on Morphinism is as good as that on alcoholism, the treatment being especially worthy of notice. The writer favours the gradual withdrawal of the drug, and has found it advantageous to spread the period of reduction over a term of from two to three weeks, or longer, and he prefers to begin at once by administering one-half of the usual quantity taken by the patient just before the treatment is begun. He also states that three months ought to be the minimum term that the patient should be under direct control, but that wherever it is possible at least double that time should be allowed. Dr. Kerr also considers chloralism, chloroformism, arsenicism, and several other drug habits, including the more unusual ones associated with gelsemium, paraldehyde, and antipyrin.

It would be useless to attempt to review all the articles contained in this volume, but we would draw special attention to one or two. Seasickness, or, to use the scientific term, "Naupathia," is treated of by Dr. A. L. Gihon, of the United States Navy. The author brings forty years' experience to bear, and has produced the best article on the subject which we have yet met with. After a careful review of the various theories which have been brought forward as to the pathology of this disagreeable but too well-known affliction, Dr. Gihon points out that there is substantial agreement among the most recent authorities as to the place of naupathia among the neuroses. It is primarily and essentially a marine vertigo. The movements of the vessel disturb the accustomed relation of the individual to surrounding objects and convey through various channels a succession of irregular and unexpected shocks to the nervous system, which fails to effect the necessary adjustments for equilibrium, inducing at first vertigo, "nervousness," malaise, headache, and afterwards, the sympathetic system being involved, nausea, vomiting, and prostration. With regard to treatment, after a careful study of the various methods which have been suggested or lauded by many authors, Dr. Gihon is forced to the usual conclusion that the simplest and most efficacious is to follow the counsel of Rey, as quoted by Irwin, "Fermez les yeux et prenez patience." Another interesting paper on an unusual subject is one by Dr. Georg von Liebig of Munich on Mountain Sickness—an excellent and carefully studied paper.

The section on Diseases of Occupations is by Dr. James Kendrie Lloyd of Philadelphia. The amount of information given on this subject may be judged by a mere enumeration of some of the occupations considered: workers in arsenic, mercury, lead, phosphorus, copper, zinc, tin, chromium, chlorine, bromine, iodine, cyanogen compounds, illuminating gas, aniline, alkalies, &c.; also effects of injurious environment, such as heat, cold, compressed and rarefied air. Then follow the fatigue neuroses, writer's cramp, telegrapher's cramp, miner's nystagmus, and effects of constrained attitudes whilst following various trades, shoemakers, porters carrying heavy weights, &c. Altogether Dr. Lloyd's article occupies nearly two hundred pages, and in itself is a most valuable monograph.

The subject of Poisons is dealt with by Dr. Beaumont Small (Organic Poisons) and by Dr. James Stewart (Non-organic), both papers being creditable to the authors. Other articles in this volume are: Shock and Collapse, by Dr. G. F. Shrady of New York; and Osteomalacia, by Dr. Councilman of Boston.

Taking the volume as a whole, we have nothing but praise for it, and if the succeeding volumes equal it and the two previous ones in quality the encyclopædia will form a most valuable library.

A Manual of Physiology, with Practical Exercises. By G. N. STEWART, M.A., D.Sc., M.D., D.P.H. Camb., of Downing College, Cambridge, Professor of Physiology in the Western University, Cleveland, U.S.A. London: Baillière, Tindall, and Cox.

OUR students are already numerously supplied with manuals of physiology; a new text-book on the subject must therefore make its way by sheer force of merit among others. We may say at once that the one before us, a new manual by Professor Stewart, amply deserves to do so. It is one of the very best English text-books on the subject. In this country physiology is a branch of education mainly because it is among "the institutes of medicine." Its place among these institutes is kept by virtue of threefold claims. (1) The subject contains a number of facts about the normal body which form knowledge necessary to all who are to deal with the reactions of disease; (2) the subject works by methods which, as compared with those applicable at the bedside, are rigorously precise and scientific and thus afford to the medical student a wholesome training towards accuracy of observation and cautiousness of inference; and (3) for that smaller number of students who intend exclusive devotion to consultation work or to medical research it is valuable as teaching theory and technique applicable to medical research itself. From each of these three points of view the manual before us is a thoroughly excellent work. It contains a justly-selected sufficiency of facts; its theoretical disquisitions are remarkably lucid; and both fact and theory are treated with a breadth and power that prove the writer to be absolutely capable both as regards the principle and practice of what he is describing. On not a few pages

literary merit is displayed of an order rarely met with in science handbooks. We may quote, in instance, the following from p. 373. In vigour and picturesqueness it challenges comparison with the well-known passage in the closing chapter of Foster's Text-book, where "death" is the theme of the chapter :—

"*Living and Dead Proteids.*—Now and again a living proteid molecule in the whirl of flying atoms which we call a muscle fibre, or a gland-cell, or a nerve-cell, falls to pieces. Now and again a molecule of proteid, hitherto dead, coming within the grasp of the molecular forces of the living substance, is caught up by it, takes on its peculiar motions, acquires its special powers, and is, as we phrase it, made alive. But it is not any difference in the kind of proteid which determines whether a given molecule shall become a part of one tissue rather than of another. For it is from the serum-albumin and serum-globulin of the blood that all the proteid material required to repair the waste of the body must ultimately be derived; and a particle of serum albumin may chance to take its place in a liver cell and help to form bile, while an exactly similar particle may become a constituent of an endothelial scale of a capillary and assist in forming lymph, or of a muscular fibre of the heart and help to drive on the blood, or of a spermatozoon and aid in transferring the peculiarities of the father to the offspring. Indeed, although there are differences of detail the broad lines of nutrition are the same for all tissues, and just as a tomb or a lighthouse, a palace or a church, may be and has been built with the same kind of material, or even in succession with the very same stones, so every organ builds up its own characteristic structure from the common quarry of the blood."

In one feature the book stands unique among the English manuals; it includes a number of directions for practical exercises. At the end of each of several chapters various exercises appropriate to the subject-matter of the chapter are appended, printed in smaller type with circumstantial details and with figures. This we regard as a step forward in a good direction. It emphasises the value to the student of making some observations for himself. The author, responsible as he now is to his transatlantic pupils, has wisely thought it necessary to go outside the limitations imposed upon students of physiology in the mother country. Among the observations for which he therefore gives directions are some which could not in this country be performed except under licences such as are never granted to students by our own Home Office. Some of the exercises will be especially welcome to teachers, however, in this country: notably one dealing with the "circulation time" on p. 157.

A useful sketch of the comparative physiology of digestion and respiration is prefixed to the chapters dealing with those subjects; in this respect a deficiency in our existing text-books is met, and the volume gains by giving the student the broader aspects of those problems which interest mainly in their particular application to man alone. That the author is well known for his researches in electrical physiology and into questions connected with blood-flow and with animal heat may be the reason that his chapters on those divisions of the subject appear to us to be perhaps especially excellent. The critical account given of the functions of the cerebral hemisphere is also particularly judiciously and clearly expressed. The text is well up-to-date; even such lately published matter as Schäfer and Oliver's vaso-convulsant toxin from the supra-renal gland is included, and a practical exercise upon it given. In a second edition, which we hope the work will speedily reach, some corrections of verbal errata should be made; thus on p. 252 occurs "of" for "off," "copartnery" for "partnership." The explanation of the Helmholtz method for reducing "break" shocks to equality with "make" shocks might be more clearly put; it is a point of difficulty to some students. Under quantitative estimations of uric acid the useful ammonium chloride method might with advantage be included. The index to the volume is imperfect and might be much amplified; but the text is too well arranged for this defect to interfere seriously with the handiness of the volume for reference. The illustrations are profusely numerous and are good, the majority being also original. There are in addition to figures in the text five page-plates—coloured lithographs from sketches of histological preparations.

Guide to the Medical and Dental Professions; with a chapter on Lady Doctors. By PERCIVAL TURNER. London: Baillière, Tindall, and Cox; or of the Author, 4, Adam-street, Adelphi, W.C.

OPPORTUNITIES of becoming acquainted with the financial and business department of a medical practitioner's work constantly occur to the author of this volume, and he has given us in its pages some of the results of his experience. The weekly journals abound with instances of the difficulties which befall many of us through lack of worldly wisdom and adroitness—an unfortunate state of things, no doubt, but perhaps inevitable, for medical education and training do little or nothing to develop the qualities essential to those whom it is customary to describe as "good men of business." Individual experience—too often dearly bought—in course of time supplies the deficiency, but this tedious and costly teaching may be to a great extent avoided by attention to Mr. Turner's precepts. The subjects treated of by him are very necessary to be understood by the great majority of practitioners, but it is keeping well within the mark to say that most young medical men have only vague notions respecting them and can hardly fail to derive some benefit from the suggestions of a competent adviser. A general idea of the nature of the book may be gathered from the headings of some of the chapters, which are as follows:—Qualifications and Registration (Chapter III.); Covering and the Employment of Unqualified Assistants (Chapter IV.); the Medical Agent (Chapter V.); Assistants and their Duties, Principals and Assistants, the Locum Tenens (Chapters VI., VII., VIII.); Appointments (Chapter IX.); Setting Up and Purchase of a Practice, Partnership, How to Sell a Practice (Chapters X., XI., XII.); Arbitration (Chapter XIV.); Book-keeping (Chapter XV.). Chapter XVI. is devoted to Dental Practice, which, in the author's opinion, affords better prospects of success than medical practice does. Miss F. M. Strutt-Cavell contributes a chapter on Lady Doctors.

Analytical Records
FROM
THE LANCET LABORATORY.

THE PERFECTED WYETH BEEF JUICE.

(WYETH AND BROTHER, PHILADELPHIA. LONDON: BURROUGHS, WELLCOME, & Co., SNOW-HILL-BUILDINGS, E.C.)

WE have commented before upon the real excellence of this preparation, which has further been improved by increasing its degree of concentration in such a manner as also to increase its stability. Our results of analysis are in perfect accord with these statements. Thus we find that the two albuminous constituents of beef juice, expressed in the cold, and which solidify on heating the juice, are increased 30 per cent., amounting in the new preparation to at least 4·24 per cent., or 18 grains of dry beef albumin in a fluid ounce. The other extractives of beef are similarly in richer proportion. The total organic matter, for example, of the old preparation was 38·01 per cent., in the new it is 47·30 per cent. The mineral matter in the old was 17·12 per cent., and in the new it is 18·16 per cent. We find it is still free from objectionable preservatives, while the flavour is agreeable and such as can only be due to the selection of beef of the

finest quality. It contains all the force and energy giving matter of beef in a pleasant and in a rapidly available form.

(1) IMPROVED GELATINE CAPSULES; (2) EFFERVESCENT FRUIT TABLETS.

(JOHN RICHARDSON AND CO., LIMITED, LEICESTER.)

Gelatine capsules with various drugs contained therein have recently been submitted to us by this firm; these capsules leave nothing to be desired in regard to flexibility and the ease with which they are swallowed and other special properties which render them a valuable means of administering drugs, and especially nauseous drugs. Flexibility in particular is a characteristic of these capsules worthy of commendation. There is no difficulty in swallowing them, so readily do they yield to whatever shape that pressure brought to bear upon them may demand, the slippery effect produced upon the gelatine by the saliva successfully aiding their passage. The specimens sent us included Pil. blaud = 1 dr.; ol. santal. ung. = 10 m.; quiniæ sulph. = 3 gr.; pot. bichrom., $\frac{1}{10}$ gr.; colchici sal. ℞o.; ol. ricini, 15 m.; bals. copaibæ, 10 m.; and syr. Easton 30 m. The effervescent fruit tablets, of which we have received five varieties, are excellent. They are most pleasantly flavoured and delicately acid, dissolving with effervescence in the mouth, promoting the flow of saliva, and thus affording relief to thirsty feeling. The flavouring included in one instance lemon, in two lemon and rose, in three orange, in four orange and rose, and in five lime. The delicate and attractive flavour and fragrance of the lime have been secured in the last tablet in the list with particular success. The tablets are distinguished by delicate colouring, characteristic of the fruit from which the flavourings are derived. The colouring material, according to our examination, is free from objection. The tablets create a very pleasing and cleansing sensation in the mouth and induce a flow of saliva which lasts for some time. They will be found very useful in dryness of the mouth and will afford a resource of distinct service to cyclists and others engaged in outdoor exercises, as well as to those who require to use their voice continually.

WIESBADEN GOUT WATER.

(WIESBADEN BRUNNEN COMPTOIR, LONDON, 25, GREAT TOWER-STREET, E.C.)

A litre of this water contains, according to our analysis, 8·47 grammes of bicarbonate of soda and 7·84 grammes of common salt. It is practically free from lime salts and contains but a trace of sulphates. It contains a slight excess of carbonic acid gas, so that it is gently effervescent on withdrawing the cork from the bottle. Its composition, therefore, is well suited to those requiring a course of carbonated alkaline and saline waters and the water should be useful in the treatment of gouty disorders arising from chronic indigestion, from hyperacidity, or those connected with them, as in hepatic derangement. The dissolved carbonic acid gas present adds, probably, to its efficacy chiefly in exerting a sedative action upon the gastric nerves. The water has the softness of salinity and taste characteristic of a natural water, which is not found in an artificial water of the same composition.

PITKEATHLY WATER, PLAIN, AND PITKEATHLY CUM LITHIA.

(REID AND DONALD, PERTH; LONDON: D. WHEATLEY AND SONS, 24, SOUTH AUDLEY-STREET, W.)

Pitkeathly is a perfectly bright and sparkling water, yielding an alkaline residue on evaporation equivalent in acid neutralising power to about six grains of bicarbonate of soda per pint. It is free from organic impurity and is characterised by a marked softness of flavour. It contains traces of lithium, according to the evidence of the spectroscope. It is a very pleasant and wholesome table water, and care is evidently taken in the collection and bottling, since every one of the specimens examined was quite free from sediment and other objectionable suspended impurities. Pitkeathly cum lithia manifests an alkalinity equal, according to our analysis, to 10½ gr. of bicarbonate of lithium to the pint. The residue obtained on evaporation gives, when made acid with hydrochloric acid, a strong crimson-red band in the spectroscope. It is pleasantly sparkling and agreeably smooth to the taste. It may be used with advantage as a diuretic, and to some extent as a uric acid solvent.

NEO-KOLA.

(THOS. CHRISTY AND CO., 25, LIME-STREET, E.C.)

Neo-kola is stated to consist entirely of pure kola, with a trace of vanilla flavouring. It is a fine, chocolate-coloured powder, which, when prepared in the same way as cocoa, affords a palatable and stimulating beverage. It is said to obviate waste of tissue during fatiguing exercise, because of the presence of a glucoside, "kolanin," or kola red, of which it has been estimated by analysis to contain nearly 4 per cent. We found in the preparation which contained 10 per cent. moisture, 2·55 per cent. of caffeine, the mineral matter consisting of alkaline carbonates and phosphates amounting to 3·9 per cent. It certainly merits trial as a substitute for tea, coffee, or cocoa, and we do not doubt that it would be of distinct service in cases of unusual fatigue and exhaustion.

PREPARATIONS OF THE LIQUOR CARNIS CO.

(LIQUOR CARNIS CO., 28A, FARRINGDON-STREET, E.C.)

There is now no gap in the really excellent list of foods of the Liquor Carnis Co. Their list provides two classes of preparations—those containing raw beef juice, and those prepared with bone marrow—one or other of the members of which will be found to comply with any special requirement which a patient may exhibit. To the first belong—Liquor Carnis, a powerful beef essence expressed in the cold, which is the embodiment, therefore, of the real nutritive qualities of a beefsteak; Malto-Carnis, a highly satisfactory combination of liquor carnis with malt and cocoa, of pleasant flavour, and representing the nourishing principles of beef, the digestive properties of malt, and the stimulating qualities of pure cocoa; and the Liquor Carnis Company's Meat Juice, a fluid essence containing the vital albumins of beef unchanged. To the second class belong—the ingenious compound known as Virol, which, being composed of red and yellow bone marrow and the fats and proteids of raw eggs in a ratio in accordance with physiological requirements, with the addition of active malt extract, is doubtless an excellent, as it is a very pleasant, substitute for cod-liver oil; Marrol, consisting of marrow fat and active malt essence, which presents the appearance of a perfectly uniform fluid, with no free fat, but which separates in tiny globules on the addition of water; and, lastly, Virol-sans-Sucre, identical in properties with ordinary virol but specially adapted to the requirements of those who cannot take sugar. As we have said, the list is practically complete, being designed for all classes of patients and containing a series of admirable foods the composition of which is founded upon a sound and safe physiological basis. Some of them we have examined before, and it is satisfactory to be able to report that their standard of quality and strength is more than maintained.

MENTHOL SNUFF.

(BURROUGHS, WELLCOME, AND CO., SNOW-HILL-BUILDINGS, E.C.)

This is a yellowish powder containing menthol, cocaine (one-sixth per cent.), ammonium chloride, camphor, and lycopodium, of a degree of fineness and lightness which make it well adapted for administration as snuff. It is put up in neat japanned boxes, convenient for carrying in the pocket. The powder is characterised by the peculiarly agreeable smell of the volatile oils indicated which render it useful as a mild local anæsthetic and as a vascular stimulant

and antiseptic, particularly in catarrhal conditions of the nasal cavities.

"BIG RAPIDS" MEDICINAL WATER (ALTERATIVE).
(INGRAM AND ROYLE, LIMITED, 52, FARRINGDON-STREET, E.C.)

Some idea of the degree of mineralisation of this water may be gained from the fact that it contains about ten times the quantity of mineral salts present in an equal volume of sea water. Nor are the constituents very widely different, 73 per cent. of the saline residue (itself amounting, according to our analysis, to 338·60 grammes per litre) consisting of common salt, 18·5 per cent. of calcium chloride, 8·0 per cent of magnesium chloride, and 0·5 per cent. of bromide of sodium. It is, in fact, supercharged with salts—is saturated. It is described as the strongest natural medicinal water known, as an alterative and not purgative, as proof against freezing, and as non-injurious to jewellery. The addition of chlorine water turns the water a bright brown colour from the liberation of bromine. Except, perhaps, for the important quantity of bromide of sodium it contains, we do not know what advantages it offers therapeutically over a saturated solution of common sea salt, used either externally or internally as recommended.

New Inventions.

A SIMPLE FORM OF EVACUATING SYRINGE FOR LITHOTRITY CASES.

I HAVE lately had made for me an evacuator which presents certain advantages over those generally used in the operation of lithotrity. It consists of an indiarubber ball, shaped like a pear with two stems, one at right angles to the other. The one carries a vulcanite or metal socket to receive the evacuating catheter, the other a glass receptacle for débris. This is the whole apparatus; there are no valves, no taps, and no detachable portions; the shape is such as to allow of direct filling and cleaning, the action of gravity alone being depended on to prevent the return of débris into the bladder, and the skill of the manipulator to obviate any escape of fluid. The simplicity of the apparatus is such as to raise doubts of its efficiency. I have, however, used it in some 100 lithotrities, removing with it stones of four, six, and eight ounces, and in one case a dense stone weighing twelve ounces. In this case the operation was completed in 125 minutes, being at the rate of 46 grains a minute—a record which but few syringes have surpassed. I can, therefore, confidently recommend operators to give the instrument a trial, and I think they will find that it possesses the following among other advantages. 1. It may be very easily and thoroughly sterilised by chemical antiseptics. This point has not, I think, received sufficient consideration, and it is very easy to see that an infected syringe may have a very prejudicial effect on the result of an operation. 2. Its shape is such as to allow the operator full control over the movements of the evacuating tube, and the size and shape of the ball may be varied to suit different operators. 3. It is greatly cheaper than any other form.

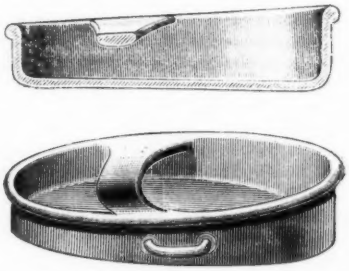
The following directions should be attended to in its use. In filling the syringe (the open end being held uppermost) water is introduced from a tap or jug; when three-quarters full the syringe must be slightly tilted to empty the glass receptacle of air. On attaching the syringe to a catheter the filled syringe is closed by the operator's right thumb and brought up to the end of the catheter; the thumb is then slipped aside and the connexion rapidly made. With a little practice not a drop of water need be spilt. If preferred, the catheter, filled with water, may be attached to the syringe before introduction. In the evacuation of débris the compression should be, as usual, gradual and the expansion sudden. A very slight pause should be made after expansion to allow the fragments to settle. The construction of the syringe is such that it forms practically a handle to the evacuating tube; under these conditions the exploration of the bladder cavity by the tube is greatly facilitated, and fragments may be readily sought for, dentified, and removed either from the general bladder cavity or from sacculations. On emptying the syringe close the orifice with the thumb, invert the syringe so that the glass receptacle becomes the highest part, and the débris falls into the ball cavity. Now turn the syringe so that the orifice becomes the lowest point and allow the débris to settle; then remove the thumb and the débris escapes with

the water, one or two squeezes expediting the escape. It may be necessary to rinse with sterile water to remove the last fragments. For sterilising fill the syringe with hot lysol solution (2 per cent.) or sublimate (2 per cent.) and leave for twenty minutes; wash out well with sterile water. The syringe may be obtained from Down Bros., St. Thomas's-street, Borough, London.

Cairo. H. MILTON, M.R.C.S. Eng., L.S.A.

COMBINED BED AND DOUCHE PAN.

FINDING that with the ordinary bed-pans I was unable to give vaginal douches without considerable discomfort to the patient, from the water passing over the back of the pan into the bed and so wetting the bed or night-clothes, I devised this pan with the view of obviating this nuisance. The accompanying diagram will best explain what I claim for it.



The patient's buttocks rest on the bridge so that any water running out of the vagina and passing under the thighs re-enters the pan behind the bridge, instead of, as in the ordinary bed-pans, being conveyed into the bed or up the patient's back. Other points in favour of this pan are—(*a*) the large quantity of fluid it will hold, thus allowing of free douching in cases of vaginal irrigation; (*b*) the fact that it can be used equally well for the ordinary purposes of a bed-pan; (*c*) the ease and thoroughness with which it can be cleansed; (*d*) the ease with which its contents can be examined, there being no corners or hidden places anywhere; and (*e*) the comfort to the patient, and the fact that she can adjust it by means of the handles at the side comfortably in position. The pans are made by Messrs. Woodward and Rowley of Swadlincote. I have had one in use for some months, and patients and nurses speak of it as being much more comfortable than the other pans in use.

H. WYCLIFFE FISHER, L.R.C.P. & S. Edin., &c.

Swadlincote.

THE LANCET.

LONDON: SATURDAY, JANUARY 4, 1896.

A NEW YEAR is not so new as it seems. It has relations with the old years which largely determine its character and its uses. Yet it teems with possibilities and excites new hopes and new exertions. The last year has been in a medical sense uneventful. Excepting during the influenza and the cold of the early months of the year, there has been no great demand for medical practice, which has accordingly been quiet and unremunerative. "So much the better for us," the public will say. And we would say so too—with this reflection that the public owes its ever-increasing health and longevity to the medical profession, for which it has less frequent need. The medical profession rejoices in the public health and is never tired of showing the ways in which it may be still further promoted. By its labours many groups of disease are practically eradicated, and of others the duration is shortened and the pain abated. It may be thought sometimes by medical men that there has been no corresponding growth of respect and gratitude for medical service. There is much to be said in support of such a complaint; but there is little use in saying it. It is to more purpose to admit that, if medical service is not adequately appraised, it is in no small degree the fault of the medical profession itself. It has made itself too cheap. "Advice gratis" is the special motto of the medical profession till it has come to be thought that no medical advice should be paid for, or that any pittance is enough for it, though given in the dead of night when all other of HER MAJESTY'S subjects are enjoying repose. We must in justice correct this demoralising habit of the profession before we can justly complain that the public does not fully appreciate our services. We are not denying that many people appreciate medical service. There are numerous grateful patients, and to serve them is one of the greatest pleasures of life; but none the less it must not be forgotten that the medical labourer, like every other worker, is worthy of his hire. One of the great questions before us as a profession in the new year is how to make medical service respected. The answer is, first, by making it good—of the very best that can be got out of our present knowledge, and then by insisting that it shall be given on proper and dignified terms. If we do not dwell on this question it is because we shall have to deal in detail with it in connexion with several movements which are likely profoundly to affect the relations of the profession to the public, and the harmony of the profession itself.

There are two medical questions of vast importance to the public and to the profession which are likely to receive much elucidation in the course of the year that has just begun. One of these is the question of compulsory vaccination, the other is that of the virtue of antitoxin in the treatment of diphtheria. Both these questions illustrate how largely disease and the treatment of it have become public questions, and how enormous is the interest of the public in medical science and its quick and ready application to individual cases. It is not for us to anticipate the judgment that will be passed on these questions, though it may be permitted to us to wonder that a discovery like vaccination, which has been accepted by the whole civilised world almost for a hundred years, should be still under discussion as a question of compulsion. The liberty which civilisation develops seems to cut two ways. But we are anticipating. It will be a study in civilisation and in politics to see how a Royal Commission presided over by so able and respected an intellect as that of the ex-Lord Chancellor, Lord HERSCHELL, will treat a subject of such huge consequence to the health of the State. The other question is of scarcely less consequence, though still in the stage of experiment. Those who talk so glibly in deprecation of legitimate experiment in medicine do not take into account the saving of life which it has effected. They have probably never had the personal experience of having a child afflicted with hydrophobia, or tetanus, or diphtheria, or we should hear less of these criticisms. The State puts itself *in loco parentis* as regards 40 or 50 per cent. of some of the gravest infectious diseases of London. It will be interesting to see how far it behaves as a wise and sympathetic parent, or a cold and critical pedant with far-fetched, fantastic notions of liberty.

In any forecast of the year it is scarcely possible to omit some consideration of the general outlook of affairs. It is undeniable that this is less pacific than it has been for years. We have much pleasure in thinking that literary and scientific men are joining their voices with those of the preachers in denouncing the idea of war between ourselves and our great English-speaking relatives of the United States. The mutual intercourse of the members of the medical profession in the two countries for the last generation has been of the most intimate and beneficial character, as has been well set forth by Sir HENRY ACLAND in his letter to the *Times*. During these long years medical science has been pursuing its "victories" of "peace." It is inconceivable, if the question of peace or war turned on the judgment of medical men, that there should be any doubt about the result, or any interruption of existing relations. Democracy, we believe, will still be guided largely by the professions—by men who give their life to the study of the highest questions that affect the welfare of nations. God grant that it may be so, and that in the coming year the world at large may little need to test the advances which have been made by medicine in opposition to the arts of destruction.

JOURNALISM dates from Imperial Rome, when, from the city, accounts of the army and its operations were sent to commanders-in-chief throughout the Empire—accounts called "Acta Diurna," which passed from general to subaltern in camp or in quarters and thereby initiated that "circulation" on which the newspaper system depends. With the collapse of the Roman organism that feature of civilisation, like many others, disappeared, to re-emerge in the Middle Ages, or rather in the "High Renaissance," when it took its first real start, not for the purpose of registering the advance or retreat of armies, but as an auxiliary in a far nobler enterprise—that of the rescue of

humanity from misery and want, from disease and premature death.

THÉOPHRASTE RENAUDOT, one of medicine's forgotten worthies, is the "hero and eponymus," if not of modern journalism as a whole, at least of that higher journalism which takes cognisance of the physical and moral requirements of the citizen in their largest as well as in their most detailed sense. Medically trained — indeed, a "physician before his time," such as even MOLIÈRE would have spared—RENAUDOT, early in the seventeenth century, instituted in his own house in Paris a consulting-room for pauper patients and clinical wards for urgent cases, with a laboratory for the aid or correction of diagnosis as well as for the preparation of medicaments. In this way he penetrated into the *vie intime* of the poor, and as a means of their rescue or rehabilitation he started a "Gazette," primarily to announce the names, the characters, the qualifications, and the addresses of his honest and well-intentioned clients in want of work. Listening to many a tale of hopeless struggle with hard conditions, he became aware of the poor narrator's circumstances, the ill-health that beset him or his family, or the death from disease or starvation that awaited both. In 1640 he instituted his "Assistance Publique à Domicile"—an outgrowth from his "Gazette," and a practical supplement to the same—thus inaugurating two of his country's mainstays, whose humble beginnings are almost overlaid and forgotten in the magnificent development they have reached It is with his journal, however, that we are more immediately concerned to-day. It was still almost in its cradle when, like Hercules, it had to grapple with the two great serpents of modern civilisation—Privilege and Corruption. These were most strongly entrenched in the institutions with which his humanitarian zeal brought him into daily contact—the medical corporations. The abuses of these; the nepotism in their *personnel;* the deflection of their funds from the object with which they had been bequeathed into the coffers of mercenary hangers-on; and the practical defeat of the charitable—and above all, of the relieving or curative—mission of their founders—these provoked him to indignant protest and to scathing exposure, till he became involved in animated controversy with their self-interested upholders and the hirelings in their pay. But he triumphed in the end. The lusty blows he dealt at the institutions he assailed were so salutary to themselves as well as to the public cause that, in the words of CAMILLE DES MOULINS, "his pen, like the spear of ACHILLES, healed the wounds it inflicted." To him and his "Gazette" France owes the beginning of her improved hospital and teaching system. But his beneficient activity did not stop there. Primarily interested in the relief of the poor, he not only protected them from the exactions of the usurer by the establishment, on the Italian model, of "Monts-de-Piété," but he safeguarded those institutions by a system of inspection whereby the removal to them of infected wearing apparel from the owner's house was effectively supervised. He was thus, says the distinguished sanitarian and toxicologist of the University of Paris, Dr. BROUARDEL, "the beginner of a long series of regulations now recognised and in working in State medicine," thus educing good from evil and making his medico-journalistic knight-errantry the renovating force by which society from its lowest grades upwards was purified and strengthened.

From the broad humanitarian initiative of RENAUDOT and his "Gazette" medical journalism gradually assumed a more specialised, more professional, phase, and in Germany, for instance, we had the first exemplar of the newspaper as an auxiliary of the healing art in HUFELAND'S *Journal der Heilkunde*, started more than a century ago. Since then the weekly and monthly or quarterly literature of the profession has multiplied till the very titles of its periodical publications would fill a volume, and the student, the investigator, and above all the practitioner, is bewildered amid the number of caterers for his professional or scientific refection. So much is this the case that an eminent teacher and pioneer of science at the Eleventh International Congress of Medicine and Surgery took the sense of that great assembly as to how to economise the reader's attention amid such an *embarras de richesses* and spare the investigator, already severely taxed as to time and working power, the mortification of retracing ground already traversed and announcing as his own a "discovery" made in another hemisphere or described in the organ of another school. But, whatever method may be devised to concentrate the scattered lights of observation and research, and so to perfect the "Dionysius ear" of medical journalism, let us not forget the pioneers but for whom those lights would have been, if not withheld, at least disastrously postponed. RENAUDOT, we have seen, made the healing art a subject of social and State interest by turning on it the bull's-eye of publicity and bringing to the light of day the abuses, the corruption, and the perpetuation of incompetence that defrauded the profession and the public of their legitimate rights. The ground was thus cleared for those profounder, more specialised studies by which medicine as an instrument becomes refined and perfected, till the practitioner and the investigator alike can pursue their avocations with a free hand and an undistracted eye. What was achieved for France by her all too tardily acknowledged benefactor was performed for the English-speaking world by the Founder of THE LANCET, whose crusade against abuses parallel with that of his French prototype was all the more strenuous insomuch that these had been in-woven and in-grained into the very fibre of a more advanced civilisation. Influences of every kind—wealth, position, the prestige of eminent names—were all arrayed against him—all, one by one, to go down and disappear before his intrepid and uncompromising criticism. At the opening of another year, the seventy-third anniversary of its birth, THE LANCET may be excused for this momentary retrospect of its past. "Excused," we say, for the very ardour with which the perennial fight with disease is fought, the very intensity with which new weapons of precision are fabricated and new wielders of them told off in great force to the front, are apt to induce forgetfulness of the strategy that conceived, and the right arm that won, the vantage ground whence victory will be finally assured.

THE examinations of the Conjoint Board in England have undergone great modifications recently, and will apparently

undergo some further change at an early date. Students who were registered before Jan. 1st, 1892, and who have commenced, or shall commence, their studies on or after Oct. 1st, 1894, are examined on a four years' curriculum of study. Their examinations are divided into three—viz., a First Examination in chemistry, with chemical physics, materia medica, and pharmacy, elementary anatomy, and elementary physiology; a Second Examination in anatomy and physiology; and a Third Examination in medicine (including therapeutics, medical anatomy, and pathology), surgery (including surgical anatomy and pathology), and midwifery (with diseases peculiar to women). With the exception that at the Second Examination anatomy and physiology must be taken together, any of the other subjects may be taken singly. With the institution of a Five Years' Curriculum a complete change in the examinations took place, and new regulations were laid down for all students who have been registered since Jan. 1st, 1892. The examinations were increased to four—viz., a First, Second, Third, and Fourth or Final Examination. In the First Examination elementary biology was substituted for physiology, and materia medica was omitted, so that the subjects appear as chemistry and physics, practical pharmacy, elementary biology, and elementary anatomy. Practical pharmacy could be postponed until the Third Examination. The Second Examination, in anatomy and physiology, was unaltered. The Third Examination, for which the candidate only became eligible at the end of four years' study, was extended, for under the head of medicine we now find medical anatomy, pathology, practical pharmacy (if not passed before), pharmacology, therapeutics, forensic medicine, and public health. Elaborate synopses are published as to the range of the examinations in pharmacology (now appearing as a distinct branch of medicine), forensic medicine, and public health, and it would be difficult to make them much more comprehensive. Surgery and midwifery remained as before, except that an option was allowed to the candidate as to whether he presented himself in midwifery at this or the Final Examination. The Final Examination at the end of the fifth year was simply stated to be in clinical medicine and clinical surgery, without any further explanation. This scheme must have been found unworkable as to its Third and Final Examinations, and no one has been examined under the regulations.

On Nov. 22nd of last year a revised system of examinations was issued. The examinations are again reduced to three—viz., First, Second, and Third or Final. Elementary anatomy has been omitted altogether, so that the subjects of the First Examination now stand as chemistry and physics, practical pharmacy, and elementary biology, but practical pharmacy may be passed at any time during the curriculum. The Second Examination is again left untouched. The subjects of the Final Examination remain as before and as regards medicine and surgery can only be passed at the end of the fifth year of study. The examinations, however, will be much extended, for there will be two papers in medicine, including forensic medicine, public health, pathology, and therapeutics; microscopical specimens will be introduced into the surgical *viva-voce* examination; and the clinical examinations in medicine and surgery will be increased in length. The examinations in midwifery and in pharmacology, which now appears as a separate subject, may be passed at any time after the end of the fourth year. A separate paper in pharmacology, without any *viva-voce*, is proposed, and candidates may be rejected in this branch of medicine alone, without any regard being paid to their proficiency in the rest of their medical work. Pharmacology is thus separated from practical pharmacy and therapeutics and put on a level at the final examinations, so far as the rejection of the student is concerned, with medicine, surgery, and midwifery. But why stop here? Why should not the candidate have separate papers in pathology, therapeutics, forensic medicine, and public health, and be rejected if he does not come up to the standard in every one of these subjects, his proficiency in the others being altogether ignored? This would be the logical outcome of the new regulations. However, as probably the Conjoint Board in England will govern the curriculum of the average student in London for some time yet, we are pleased to see that the Royal College of Physicians of London, with the consent of the Royal College of Surgeons of England, has placed pharmacology in its former position as a subsidiary branch of medicine, and has not left it "a distinct position as a subject separate from medicine, midwifery, and surgery."

We therefore anticipate the issue of another revised set of regulations at an early date, so that candidates under the five years' curriculum may really know their position at the Final Examination and how to employ their fourth and fifth years of study to the greatest advantage.

Annotations.

"Ne quid nimis."

THE NEW YEAR HONOURS.

IN the list of the honours which it is customary for Her Majesty to confer at the beginning of the New Year are included the names of six members of our profession: Surgeon-General Sir Joseph Fayrer, K.C.S.I., LL.D., M.D., F.R.S.; Robert Martin Craven, F.R.C.S. Eng. and Edin.; Willoughby Francis Wade, M.B., F.R.C.P.; James Acheson MacCullagh, M.D.; Surgeon-Lieutenant-Colonel Samuel Haslett Browne, M.D.; and Henry Alfred Alford Nicholls, M.D. When Surgeon-General Sir Joseph Fayrer retired from his duties in connexion with the India Office, we took occasion to advert to the long and varied services in which he had been engaged, to the way in which his name might be said to be historically associated with the siege of Lucknow, to the good scientific work he had done, and to the loyal way in which he had striven to uphold the interests and position of the medical officers of our naval and military medical services. We may now share, therefore, in the gratification which his numerous friends feel on learning that Her Majesty has been pleased to include his name in the list of New Year's Honours by conferring the dignity of a baronetcy upon him. Sir Robert Martin Craven and Sir Willoughby Francis Wade, who have received the honour of knighthood, are representative members of the profession in the provinces. The former, who was elected to the Fellowship of the Royal

College of Surgeons of England in 1889, is a justice of the peace for Hull and late lecturer on Anatomy at the medical school in that city; the latter is a past President of the British Medical Association and has made valuable contributions to medical literature. Sir James Acheson MacCullagh, who has also been made a knight, represents Ireland in the list, he having held the office of mayor in the city of Derry. Apart from the honour conferred upon Sir Joseph Fayrer, whose work has been so varied and so important officially that he may be said to represent the whole of the profession rather than one branch of the public services, the Indian Medical Service is represented by Surgeon-Lieutenant-Colonel Samuel Haslett Browne, M.D., who receives a Companionship of the Most Eminent Order of the Indian Empire. Mr. Henry Alfred Alford Nicholls, M.D., Medical Officer of Public Institutions of the Island of Dominica, has been appointed a Companion of the Most Distinguished Order of St. Michael and St. George. To all of these gentlemen we offer our hearty congratulations upon their well-earned distinctions.

DOGS OF WAR AND SANITARY DOGS.

SUCH is the subject of an appreciative notice, signed "Écot," in the *Archives de Médecine et de Pharmacie Militaires* for December, 1895, the source of inspiration being a series of articles lately published in a Munich journal. It seems that Herr Bungartz, who is described as "a painter of animals and a man of letters," has occupied his leisure moments in training various members of the canine race with the view to the utilisation of their talents in warfare. The narrative containing the record of this new departure is said by our contemporary to be worthy of attention in every respect. Commencing with a general disquisition on the kind of dog suitable for war purposes or sanitary work, the writer next gives his views regarding the qualities of mind and body that are essential in a trainer, and finally proceeds to set forth his method of educating the selected animals. Dogs possessing a natural aptitude are susceptible of instruction in outpost duty, patrolling, and reconnaissance over ground of any degree of roughness, and can be taught to act as estafettes, and also as carriers of ammunition up to 20lb. in weight. The procedure for succouring wounded men is minutely detailed. Naturally the words of command for the same manœuvre should never be varied. Training at first should be carried out in the daytime, on a smooth surface free from obstacles, and be gradually extended until the dogs become proficient over the most difficult country during the darkest of nights. In the latter case each animal should have a lamp fixed to its forehead. When the search is ordered in the daytime a staff with a pennon is bound to the canine searcher's back in order that the wounded man may erect it by his side and thus indicate his whereabouts. By means of suitable vehicles with bicycle wheels dogs can assist in the transport of invalids, one dog, with the aid of two orderlies, being able to draw two *hors-de-combat* subjects in the lying-down position. A sanitary dog's accoutrement includes a couple of haversacks—for food, surgical dressings, &c.—which are attached to its collar, but hang well back over either flank. The animal likewise carries its own blanket, neatly folded, across its shoulders. The system to which Herr Bungartz has devoted so much time, patience, and ingenuity has now received official sanction. The inventor exhibited the prowess of his dog "Sanita" on Oct. 1st before Prince de Wied and a numerous company of civil and military notables, the wounded men being represented by infantry soldiers. After accurately obeying a number of preliminary directions the order "search for wounded" was given, and off went Sanita at the double. In a very short time she found the first subject and, galloping back to her master, conducted him to the spot. Within the space of half an hour the accomplished creature succeeded in conveying rescue parties to the eight "wounded" soldiers, although the ground where they were lying concealed was fairly difficult. The experiment was next essayed during the night, when Sanita carried an electric light, which was distinctly visible from a distance throughout her evolutions. On the whole, the exhibition is said to have been a great success.

THE DISTRIBUTION OF THE PROFESSION.

THE Medical Directory for 1896 keeps us well informed of the numerical strength of the profession and of the distribution of its huge numbers. The present issue is broader in its dimensions than its predecessors, and represents the addition of no less than 730 names to the ranks which were already so overcrowded. The best that can be said of this increase is that it is less than that of the previous year over its predecessor by 88, and that in five of the ten preceding years the numbers added to the profession by registration were more than they were last year. The actual numbers in the Directory for 1896, spread throughout the empire, are 33,320, as against 32,590 in the previous year, and they are distributed as follows, the numbers in brackets being those of the previous year for comparison:—The number of practitioners in the London list is 5835 (5742); that in the provinces, England, 14,702 (15,313, including Wales), the list for Wales being 1028 (989); that for Scotland 3264 (3224); for Ireland, 2563 (2511); registered practitioners practising abroad, 3453 (3321); naval, military, and Indian medical services, excluding those which appear in other lists, 2451 (2452); too late list, 24 (27). From a rough glance at the obituary columns, constructed apparently with much care, it would seem that 580 members of the profession died during last year. We need not say that this indispensable volume abounds in information of all sorts for the use of the members of the medical profession. There is still room for further additions and improvements, but it is a most creditable performance.

"THE LANCET" RELIEF FUND.

IN that part of the Annus Medicus which recorded the work of the benevolent agencies of the profession we intimated last week that the tale of the year's work of the unpretentious, and, we hope, useful, Fund which is associated with the name of this journal would be told in our present issue. The usual meeting of the Almoners was held on Monday last, and the seventh annual report has now been issued, and will be found, together with the balance-sheet for 1895, on p. 50. During the course of the year loans or gifts to the total amount of £363 have been granted. The number of applications for relief was fifty-six, and in twenty-six cases assistance was afforded. These numbers show that there still exists a considerable misconception as to the precise objects and scope of the Fund. Indeed, we sometimes receive an appeal for a loan of so large a sum as £200 or even £300—amounts which, as may be seen by anyone who will take the trouble to glance at the provisions of the Fund, are quite out of the question. We, therefore, earnestly entreat those of our readers who may be asked to endorse applications to carefully peruse the application forms and to refrain from giving any testimonial except to those whose cases are such as to make them strictly eligible for the benefit of relief—i.e., registered medical practitioners, or widows or orphans of members of the profession, who, in consequence of the supervention of some unexpected exigency, which is not likely to recur, have pressing need of immediate and temporary pecuniary relief and are likely to be permanently benefited thereby. The Fund has now been in existence for seven years, and we may, perhaps, without straying far afield from the paths of good taste, venture to

think with gratification that it has, in some—we might almost say many—cases, held out a saving hand to a brother in times of trouble and enabled him, by aid promptly rendered, to overcome his difficulties. Promptness of assistance is intended to be a prominent feature of the work of the Fund. In one urgent case (No. 304) the application was received, considered, relief granted, a cheque despatched, and a letter of acknowledgment and thanks sent off by the candidate the same day. Our "obituary" in the Annus Medicus contains, alas, the names of two distinguished surgeons who had been Almoners of this Fund—indeed, Mr. Hulke was lending us his kind assistance at the time of his death, whilst Sir William Savory had afforded us similar ready help during his Presidency. To the three present Presidents who courteously give us so willingly and so ungrudgingly the benefit of their services as our colleagues in the Almonry of the Fund we tender our heartfelt thanks.

V. V. V.

WE have received a prospectus which for barefaced impudence and for an intimate knowledge of the idiocy of the British public when anything connected with its health is concerned is unrivalled even by such masterpieces of puffery as the notices of Pink Pills or Mother Seigel's Syrup. A company is being formed to take from the vendor, one George E. Dixon, "M.D.," a proprietary medicine called the Vaccine Virus Vanquisher. The reasons set forth in the prospectus for assuming that this medicine will "go" are very true, if somewhat uncomplimentary to the intelligence of the average British subject. Thus we are told "there are about one million vaccinations performed annually in the United Kingdom. A large percentage of these are children whose mothers are very fearful of serious results. These mothers frequently ask the doctor for something to lessen the dangers of vaccination, but scarcely ever receive anything, being told that it is simply 'vaccination,' and that there is no cause for alarm. When they are informed that they can give V.V.V. to their children at the time they are vaccinated, and thus avoid all the dangers of vaccination, it is reasonable to expect that the greater number will avail themselves of this safeguard. In addition to this field, which numbers, as has been said, about a million annually, there are several millions of persons, both children and adults, suffering with chronic ailments of the skin, eyes, hair, internal organs, &c., many of whom are satisfied that their diseases were originally contracted through vaccination, and, as most of them have tried doctors and patent medicines year after year without success, it is reasonable to suppose that they will seek relief in V.V.V., because they have never before seen or heard of a remedy which appeals to them as aiming at the correct origin of their ailments. With regard to the efficacy of the remedy, the vendor states that it has been well tried by him in his practice for several years for this class of diseases with marked success; that the medicine as prepared is very palatable, and will not be resented by children or infants. The vendor further states that, when given to persons who are being vaccinated, it neutralises and removes all the inflammatory materials and poisonous germs which would otherwise enter the remotest parts of the system and remain there, possibly to appear only after many years." "The vendor states." We daresay he does, and we would remind our readers of the lady litigant who was wont to conduct her case in person and who upon one occasion remarked, "I suppose, my Lord, it would not be considered respectful to your Lordship if I were to call this witness a liar?" It is notoriously impossible to prove a negative, so we cannot disprove the vendor's statements, but we challenge him to prove them. There is one other statement in the prospectus which we must quote. "The vendor, to show his confidence in the future of the company, has fixed the whole of his capital in fully paid up shares." The words "to show his confidence" are surely unfortunately chosen, for they are so intimately connected with another form of commercial enterprise, which, however, does not flourish under the patronage of a Government stamp. We make no doubt that this company will flourish, for the number of fools in the world is incalculable, and they are always more ready to pay 11*s.* for half a grain of perchloride of mercury in a pint of water, or 1*s.* 1½*d.* for about a half-pennyworth of compound aloes pills, than to consult a medical man. Nor have we any pity for such idiots; but we should like to see the swindling proprietors of proprietary medicines taxed to the extent of some 70 per cent. of their earnings. If the Strand barbers could be punished, why not the great army of quacks? The simplest way to stop the abuse would be to make all *proprietary* medicines *patent* medicines, so that a complete description of the invention or secret could be readily obtainable by the public. This publicity obtains under the Patents Act of 1883. We have procured a bottle of V.V.V., accompanied by a pamphlet, and from the latter we learn: (1) that since vaccination has been introduced the death-rate from syphilis in children under one year has markedly increased; (2) that no cure has yet been found except V.V.V. (3) "that none of the syphilis in babies was inherited from their parents, it therefore must be contracted through vaccination"; and (4) that of 104 patients vaccinated from a healthy child previously vaccinated with—the pamphlet does not say what—more than half showed symptoms of syphilis or phthisis or liver or kidney complaint. We have no hesitation in saying that this pamphlet is a wicked production. It trades on people's fears and is full of, at all events, suppressions of truth. It is the duty of the Legislature to put a stop to the dissemination of such pernicious trash. We have submitted the precious stuff to analytical examination and the results of our analysis were as follows:—Total solid matters, chiefly sugar, 9·4 per cent., yielding on incineration traces of ash. The residue on evaporation burnt with an intensely green flame due to boracic acid. Chloroform extracted a marked quantity of caffeine, as well as also a bright yellow colouring substance, which behaved like an aniline dye, turning to pink on adding ammonia and resuming its original golden-yellow colour on the addition of acid. The liquid was turbid, and contained distinct traces of tannin substances, reacting with certain reagents much as a weak solution of tea would do, or as a weak decoction of the leaves of most plants. We could not trace any appreciable quantity of alcohol.

DEATH UNDER PENTAL.

PENTAL, or more correctly trimethylethylene, the modern equivalent of amylene, has recently been used somewhat extensively, both abroad and in this country, in dental practice. Amylene was employed in 1856, and besides giving it to the lower animals Snow used it for 238 patients. Of these two died, but it is by no means clear that their death was due to amylene. Dastre, writing in 1890, said its use had then been discontinued. However, Holländer, of Halle, revived a body with similar composition—pental (C_5H_{10})—in 1893. Von Mering had as early as 1887 drawn attention to what he regarded as its claims upon public favour, and Breuer and Lindner employed it for brief operations in 1892. Chalalb used it in the clinic of Professor Assaky, but did not share in the confident views expressed in its favour by Holländer, Hägler, and Philipp of Berlin. Professor Wood, assisted by Dr. Cerna, undertook an experimental research as to the physiological behaviour of pental and warned against its use, since, according to their view, it was a dangerous cardiac depressant. Rüth, as late as 1894, came to the opposite conclusion, asserting pental to be

a safer agent than chloroform and possessing many advantages over ordinary laughing-gas. It has not, however, been extensively employed, except in dental practice. Mr. Constant, after experience of some hundreds of cases, was satisfied with its action, but did not speak very enthusiastically about it. In 1892 a death was reported as having occurred during the employment of pental, but the evidence, so far as could be elicited, did not conclusively prove that the anæsthetic was to blame in the case. In all these observers' hands the danger, such as was admitted, appears to have been that incurred by heart failure, although Rüth has expressly stated that respiration fails before the heart's action ceases. In the following case the patient was a woman aged twenty-three. She attended at the Dental Hospital in Devonshire-street, Chorlton-on-Medlock, for the purpose of having several teeth extracted. She was examined by the medical attendant who administers anæsthetics at that hospital, and was, in his opinion, in a fit state to undergo the operation and to take pental. This he administered, and she rapidly passed under its influence. After the extraction of five teeth her respiration ceased, and none of the means adopted to restore her succeeded. The dental student who had operated stated that there was no particular difficulty in the operation. Pental had been used by the anæsthetist for many patients, and he stated that he had never previously met with any difficulty or danger. We are not told whether the patient was at the moment of extracting the fifth tooth resuming consciousness. If so, possibly the mechanism of death was similar to what so often occurs under chloroform. On the other hand, Holländer in his first paper spoke of his patients being analgesic rather than unconscious, as if there were no danger of reflex shock under this anæsthetic. This, of course, is a point of great importance. At present pental is on its trial, and the fullest information concerning the action of the drug is desirable; every accident should be most carefully reported to see how far we can trust the favourable opinions so freely uttered about this substance, and how far Professor Wood is correct in his warning that "pental will probably prove a most dangerous anæsthetic."

THE GENERAL MEDICAL COUNCIL AND THE DIRECT REPRESENTATION OF IRELAND.

OWING to the regretted death of Dr. G. H. Kidd a vacancy has occurred in the direct representation of Ireland on the General Medical Council. The names of several candidates have already been prominently brought to our notice—among others those of Dr. William Thomson and Dr. Archibald Jacob of Dublin, Professor Cuming of Belfast, Mr. G. E. J. Greene of Ferns, and Dr. Hercules MacDonnell of Dundalk. All these gentlemen would appear to have the necessary qualifications for success in the office they are seeking, but in all probability one of the first three will be chosen. The number of Irish representatives on the General Medical Council is seven, nominated by various bodies, the late Dr. Kidd having been the nominee of the Irish medical practitioners. All the Irish representatives are Dublin men—a fact which seems to us to give Dublin an undue advantage over the rest of Ireland. Dr. Thomson and Dr. Jacob are both Dublin men. The former is Vice-President of the Royal College of Surgeons and general secretary to the Royal Academy of Medicine in Ireland. Dr. Jacob is an earnest advocate of the claims of the provincial practitioner, and, as he himself says in his election address, and he ought to know, "Who in Ireland understands the business of the Medical Council better? Who knows the Irish medical practitioner as a student, a private practitioner, or a public officer as intimately? Who has proved greater capability of giving public expression to his wishes?"—and so on. Dr. Thomson is a consulting surgeon of eminence in Dublin, and Professor Cuming is recognised as the leading consulting physician of Ulster. He has been asked to stand by the North of Ireland Branch of the British Medical Association and by the Ulster Medical Society, and is anxious that the grievances of dispensary medical officers should be redressed. We do not presume to offer any advice in a matter which concerns Irish medical men almost solely, but we may, at any rate, point out that for Ireland to possess at least one representative outside the capital on the General Medical Council would be, at any rate, an act of justice to the remainder of the country.

THE INCOMES OF PATIENTS AND MEDICAL CHARGES.

A CORRESPONDENT seeks our opinion on the rules by which to judge a patient's income and the right of a medical man to assess it at any rate at which he may have cause, real or imaginary, to estimate it. Our opinion on such matters must necessarily be somewhat vague and general, but there are certain rules by which a medical man is guided in charging his patients. We should be sorry to see him become a sort of assessor of income-tax. We should disapprove as alike impossible and undignified any minute scrutiny into the particulars of a patient's means. The amount of his rent is a guide to his position, but only a rough one, and one not to be made too much of. On the whole a medical man does best to be guided by a sense of the value of his own services to the patient, without attempting to differentiate him from other patients and making a separate tariff for each. A man with a high rent may be practically much less able to pay than one with half the rent, and there are the greatest objections—which we cannot specify here—to a medical man speculating on the income of his patients. Questions of distance, trouble, night work, and anxiety are all fair elements for consideration. But the question of particular income does not arise save to check any tendency to undercharge or overcharge, by either of which a medical man often does himself much harm.

ORGANISATION IN SCIENCE.

AT one of the full-dress *séances* of the International Medical Congress which met last Easter at Rome, Professor Michael Foster addressed a profoundly interested audience on Organisation in Science as an Aid to Scientific Results. He carried all his hearers with him when he dwelt on the waste of time, energy, and *matériel* incurred by the lack of combination in research, particularly biological research, by which many an able inquirer finds he has consumed precious months—even years—of his life in re-traversing "ground" already "beaten" by inquirers not less able, whose worth, however, has been hidden away in archives of which he never heard, or which, even having heard of them, he has found it difficult, if not impossible, to reach. Another evil arising from this want of combination is to be found in the frequent controversies as to priority in this or that finding or generalisation, controversies not seldom resolving themselves into this—namely, that neither claimant has been cognisant of his contemporary's work, and that both have arrived independently at similar, if not identical, conclusions. A case in illustration of this latter "conflict of claims" has lately come before a French tribunal, which decided that Professor Lombroso, in his well-known treatise on "Grafologia," had exceeded the bounds of legitimate citation in the use he made of M. Crepieu-Jamin's work on the same theme. The *Corriere della Sera* of Milan contains Professor Lombroso's vindication of his procedure, from which it would appear that he

had been engaged for years on similar inquiries to those of the French writer, that he had quoted the latter wherever he had original matter to produce, and that he had ceased to quote him wherever he (Professor Lombroso himself) had reached the same conclusion independently. Now, such collisions of independent inquirers, and the consequent disputes as to priority, culminating (as in this case) in actual litigation, would be avoided by the organisation suggested by Professor Foster. To be effective, however, such an organisation should be on a comprehensively international scale, involving, no doubt, a large initial expenditure, but expenditure amply compensated by the great advantage which biological and medical science would reap from economy of energy and harmony of results. Individual ambition, as in all organisations, might have to give way; but then it would do so in the interests of truth, to which no genuine student of nature would grudge the personal sacrifice.

CHRISTMAS AT THE HOSPITALS.

AT most of the institutions where pain and suffering are ministered to special efforts are made at Christmastide, on the part of the medical staff, nurses, and friends, to brighten the lot of those who are compelled to spend their Christmas from home by reason of sickness and disease, and in previous years we have given an account of the entertainments provided for this purpose. By the courtesy of the secretaries of various hospitals we have received accounts of these festivities this year, but the enormous pressure on our space prevents us, much to our regret, from doing more than mentioning the names of the institutions where entertainments were provided. Amongst others we may mention: St. George's Hospital, King's College Hospital, the London Hospital, St. Mary's Hospital, St. Thomas's Hospital, the Seamen's Hospital, the German Hospital, the Hôpital et Dispensaire Français, the Great Northern Hospital, the Victoria Hospital for Children, and the Great Ormond-street Children's Hospital.

MOULDERS OF MEN.

THE year just closed has been a memorable one for education and the momentous interests bound up with it. Besides the perennial controversy as to the teaching of religion and the conflicting claims of Board or denominational schools, we have had quite lately the Congress of Headmasters at Eton and the commemorations, centenary and bicentenary, of two commanding figures in their profession—James Melvin and Richard Busby. Of these, the former, as Rector of Aberdeen Grammar School, was for many years the "moulder," if not the "maker," of relays of young aspirants to the professions—medical even more than legal or theological. "Grim Pluto," as he used to be called, was impatient of anything less than "thorough," therein resembling Dr. Arnold of Rugby, whose insistance on that condition was almost a fanaticism. "Accuracy," as Helps has finely put it, "is the prose of truth," and Melvin's enforcement of it in every detail of the day's work so impressed the young minds committed to him that in after-life, when fame and fortune were their portion, they have loyally declared that to Melvin and his teaching they owed whatever success they had achieved. The long list of names associated with the celebration of his centenary was in itself the tribute of which he would have been most proud—proving as they did that, if the Ultima Thule of learning is, as she has often been called, an "arida nutrix," she has been, under preceptors such as he, a "nutrix leonum." In a yet more eminent degree, as presiding over a higher and more historical school, Richard Busby deserved and obtained similar recognition. There is, indeed, no walk in the public life of England to which Westminster has not contributed men of light and leading, and not a few of the most brilliant and commanding of these were "moulded," if not "made," by Busby. Himself a scholar, as was also James Melvin, who realised in himself the accuracy he lived to inculcate, he made "loyalty to truth" a religion with the young minds he manipulated, teaching them that best of all knowledge — "to know what knowledge of a subject means" — and making exactitude in detail, in conception, and in statement so much of a pleasure that it became a "second nature" with them, a standard to which, in their respective careers, they almost unconsciously strove to conform. As was beautifully said in the finely conceived and felicitously classical prologue to the last representation of the "Adelphi"—

> "Vitam is vixit non sibi
> At in qua puer eductust huic vixit Domo."

And again—

> "Utrosque habuit favitores, ut cui dignius
> Implere visumst munus quam, quod sit sibi
> Magis in rem, id agere."

Such was Richard Busby's ideal of life—in itself a precious exemplar amd bequest to his school. The tradition of his order, that a headmaster shall be a clergyman, may have had its special justification in times past; but, as a professional critic of the late Congress at Eton reminds us, there are serious disadvantages in making that an indispensable condition of office. In these days, when science has asserted her claims in our great public schools, why should not a headmaster be chosen, *ceteris paribus*, for his proficiency in other fields of culture besides theology? Why, for instance, should not a Doctorate in Science such as our universities bestow be accepted as a qualification, when conjoined with the necessary scholarship, equally with a Doctorate in Divinity? The administration of a public school on the scale of Westminster, or Eton, or Harrow, must often bring scientific knowledge into play, especially in those departments which constitute the basis of medicine or hygiene. How many a disastrous epidemic might have been averted, and the fair fame of the school preserved, if its headmaster had possessed, in addition to his special qualifications, such a proficiency in science as Cambridge, for example, so admirably gives? Circumstances often beset a great public seminary in which a knowledge of the "corpus sanum" and the conditions of its "sanitas" is of the greatest importance on the part of its head; but consuetudinary law postpones the claims of a master so qualified to those of one who has been admitted to holy orders, and whose initiation into the conditions of health is simply *nil*. There is room for reform in this direction—reform the practical recognition of which will be a "title of honour" to the twentieth century, if not to the nineteenth, whose course is so nearly run.

ANTIVIVISECTIONISTS AND HOSPITALS.

CANON WILBERFORCE continues to insinuate that hospitals are fields for experiments upon patients. He says:[1] "I have been hoping that some recognised leader of the honourable medical profession would have authoritatively dissipated the feeling of uneasiness to which ..... I drew attention." We are unable to see how this feeling of uneasiness can be dissipated for Canon Wilberforce. If we denied that experiments are performed in hospitals in London he probably would not believe us. Can he produce any patient who has been experimented on? Of course he would say, "No, for they are all dead." Among whom does this feeling of uneasiness exist? Apparently not among the poor, for the hospitals are always full and the out-patient departments are thronged. At St. Bartholomew's Hospital, for instance, in 1894 there

[1] The Times, Dec. 29th, 1895.

were in round numbers 6000 in-patients and 161,000 out-patients, and at this hospital, according to the 1894 edition of "Experiments on Hospital Patients," from which Canon Wilberforce quotes, there are fifteen vivisectionists on the staff or at work in its laboratories. This does not look as if there were much uneasiness among the class for whose benefit the hospital in question was founded. Canon Wilberforce means, we believe, to be sincere, though he is hopelessly wrong-headed. Let him substantiate his innuendoes, not by references ten years old, but by some modern instances. The letter of "S. C. S.," in the *Times* of Dec. 27th, 1895, though anonymous, wants a better answer than Canon Wilberforce's of the 29th. "S. C. S." clearly shows that Canon Wilberforce's deductions are absolutely unfounded and puts him in the dilemma of either not having verified his references or, if he did so, of wilful misrepresentation.

SOME CLINICAL ASPECTS OF THE COAGULABILITY OF THE BLOOD.

OUR attention has been called to an excellent and suggestive paper by Surgeon-Lieutenant L. Rogers, M.B., B.S., F.R.C.S., of the Indian Medical Service, which was read before the late Indian Medical Congress and has been reproduced in the pages of the *Indian Lancet* of the 16th ult. The paper is on some clinical aspects of the coagulability of the blood. It appears that the writer had an opportunity of studying, at Netley, Professor Wright's method of estimating the coagulability of the blood and of clinically applying it. The method introduced by Professor Wright is a very simple one. It consists in pricking the finger-tip, as in the use of Gowers' hæmocytometer, and drawing up a small quantity of blood into a fine tube of uniform calibre. From four to six tubes are filled at noted intervals. By blowing down these at given moments the shortest time in which the blood is found to be clotted, so that it cannot be blown out of the tube, will be the coagulation time. With a little practice it can be determined to within 15 sec. or even 5 sec. The normal time of a healthy person is usually between 2½ min. and 5 min., varying slightly with the temperature and the time of day, especially in relation to meals, being shorter after a full meal and longer after a fast. Surgeon-Lieutenant Rogers's own time was very constantly between 2 min. 15 sec. and 2 min. 20 sec. This officer then goes on to consider and describe the methods of increasing and decreasing the coagulation of the intravascular blood as determined by numerous observations by himself and others, and the results are both interesting and instructive. He passes in review the influence of calcium chloride and the inhalation of carbonic acid gas diluted with atmospheric air by a Kipp's apparatus, or an india-rubber bag, in increasing the coagulability of the blood, and records some interesting experimental observations. With calcium chloride taken in fifteen-grain doses he found, for example, that his own coagulation time could be reduced from 5¼ min. to 1¾ min. As a result of his experiments on coagulation with various drugs usually considered to have hæmostatic properties he shows that several of these, such as gallic acid, ergotine (except in the uterine form of hæmorrhage), and potassium iodide, have no effect. The substances which reduce or retard coagulability are next considered, with the result that some interesting observations are recorded in regard to numerous agents tested in this respect, and a suggestive allusion is made to the probable explanation of the benefit derived from the administration of oxygen in some cases of pneumonia, and that of alcohol in causing a retardation of coagulation, a fact to be borne in mind in its administration during or after hæmorrhage. As regards the practical clinical application of the results of recent researches in coagulation, the writer alludes to the physiological styptic properties of calcium chloride applied locally, and to its use internally in hæmorrhagic conditions, such as severe hæmoptysis, in some cases of which he successfully gave it in fifteen-grain doses, and he points out that its use is indicated in hæmatemesis and in vesical hæmorrhage. As regards hæmophilia, it is remarked that the lack of calcium chloride in the blood is probably a very important pathological feature of the disease, and reference is made to the use of this agent and of carbonic acid gas in the treatment of this condition. His experiments with potassium iodide and low diet in their effect on coagulation do not tend to support the present treatment of certain forms of aneurysm except in so far as these reduce the force of the circulation, whereas he considers that an increased coagulability can be induced by the methods described—viz., by the administration of carbonic acid and the use of calcium chloride. The administration of the latter agent by the mouth is also of service in safe-guarding the system against the risk of hæmorrhage in certain operations. He suggests the use of vegetable acids or oxygen in cases of threatened or actual thrombosis after typhoid fever and in other morbid states attended with thromboses. We have said enough, however, we hope, to induce our readers to peruse Surgeon-Lieutenant Rogers's suggestive paper for themselves.

DEATHS UNDER ANÆSTHETICS.

Two deaths have recently been reported from Guy's Hospital as having occurred under an anæsthetic. The notes before us are unfortunately very scanty, although information was invited from the hospital authorities. A married woman aged twenty-six was admitted into Guy's Hospital on Nov. 13th, 1895, suffering from cystitis. On Dec. 2nd an operation was to be performed upon her for the relief of the condition which occasioned the bladder trouble, and she was anæsthetised by one of the house surgeons, Mr. H. W. Beach. The anæsthetic selected was ether, but nitrous oxide gas was administered first, and just as this was being changed for ether the heart's action ceased. No explanation of the death is suggested except that it was not due to respiratory spasm but to failure of respiration and circulation. As Mr. Beach remarked at the inquest, death at this stage of the administration of nitrous oxide gas and ether is extremely rare. Without a fuller record of the sequence of events it is quite futile to attempt to explain so extraordinary an occurrence. When so many persons pin their faith to the almost absolute safety of this anæsthetic, and this method of using it, it is startling to find an inexplicable death occurring in the hands of a careful and experienced hospital officer in a large London hospital, and this certainly emphasises what the events of the past few years have been impressing upon us—viz., that we know very little about the causation of death by anæsthetics. We should welcome a fuller and more detailed account of this fatality. The second death was that of a domestic servant aged twenty. She was suffering from enlarged tonsils, and the glands in her neck were also affected. On admission into Guy's Hospital her condition was considered to be very unsatisfactory, but on Nov. 26th, 1895, after she had been carefully prepared for the operation, Mr. C. H. Bryant, one of the house surgeons, administered chloroform. Two minutes after the commencement of the operation respiration ceased. Artificial respiration was practised, and the patient rallied. The operation was then resumed, but breathing again ceased, and all restorative measures failed to restore life. Many surgeons object to the employment of ether for operations which involve removal of adenomatous tumours and tonsillotomy, but whether such objection should outweigh the manifest advantage of ether for persons whose

vitality is low can only be decided in each particular case. The sudden cessation of breathing, with its resumption after artificial respiration, strongly suggests poisoning of the respiratory centre, and whether it was wise to continue the operation after so grave a symptom is at least open to question. It would be instructive to learn whether any further employment of chloroform was made, or whether the second failure of respiration was one of the "late effects" which have attracted the attention of Chalot.

CONTAGION IN THE DAIRY.

IN order to ensure the local extinction of infectious disease it is not sufficient to apply any one routine formula of treatment. Sanitary science is not, however, by any means a subject of purely technical character, but one which is to a large extent comprehensible by the general intelligence. For this reason the necessary safeguards, which are its practical evidences, must also be numbered among the duties of the private citizen. It follows that a milk-dealer convicted a few days ago at the Thames Police-court was liable for an offence in selling milk while his household premises, used also for trading purposes, were contaminated by diphtheria. The defence in this case was that of ignorance, and as such was insufficient to justify acquittal. It is, however, suggestive as bearing on other and related considerations. The disease was duly notified by a practitioner. It proved fatal in two days. Six days subsequently disinfection was carried out. In the meantime the milk trade went on, the salesman being, as alleged, ignorant as to what this implied to his customers. There are instances, of course, and these not few, in which the seclusion of the infected and the pursuit of a calling may be possible in the same establishment at the same time. The present case was evidently not of such a kind, yet the patient was not removed, and the dealer did not know that he should suspend his business. It is, to our mind, somewhat surprising that he should have been without instruction in a matter so important after a visit from the sanitary officer. Surely the work of inspection, though it cannot supersede the demand of the law, is understood to provide for such instruction where occasion requires.

DIPHTHERIA MORTALITY AND ANTI-DIPHTHERIA SERUM IN FRANCE.

CERTAIN facts and statistics which have been communicated to the Académie de Médecine in Paris by M. Henri Monod, the Director of the Public Health Department of France, will have interest for all those who desire information as to the use of antitoxic serum as a means of staying the ravages of, and preventing death from, diphtheria. The system for the registration of deaths is still very imperfect in France, and by reason of this M. Monod is restricted, as regards mortality returns, to 108 towns of 20,000 inhabitants and over; but this gives him a population of 8,150,000 to deal with, although it is limited to that which is practically urban in character. As in England, so in France, diphtheria is a rural as well as an urban disease. In the 108 towns of France which are in question the mean number of deaths from diphtheria in the first six months of the seven years 1888–94 was 2627. In the three months November, 1894, to January, 1895, the Institut Pasteur distributed over 50,000 supplies of anti-diphtheria serum, and this supply, which was maintained, was made available not only for the well-to-do but also for those who, by reason of poverty, were compelled to receive it by means of gratuitous distribution. Now in the first six months of 1895 the number of deaths from diphtheria in the same 108 towns was only 904, or a diminution at the rate of 65·6 per cent. The rate of diminution month by month went on almost uniformly from one of 56·2 per cent. for the month of January to 47·5 per cent. for the month of June. On these data alone a saving of 15,000 lives would have been effected during the first half of 1895. M. Monod, however, deals with the matter as an affair of statistics, and he does not profess to enter into the question whether the climatic and other unknown causes which influence the power of diphtheria for spread and for death were less operative in the first six months of 1895 than in the corresponding months of the seven antecedent years. Such conditions may have influenced the result to some extent; but it seems impossible to attribute solely to an unknown cause such a diminution in death as he shows in his paper to have gone on synchronously with the widespread use of the serum. The facts he quotes are well worthy of consideration by those who have to treat diphtheria either in hospitals or in the homes of the people in this country.

"SHOULD A MEDICAL MAN MARRY?"

UNDER this heading *La Loire Médicale* has a rather curious article in which this often discussed question is treated in a decidedly novel manner. There is no doubt that in the Middle Ages medical practitioners were condemned to celibacy, says the writer in our contemporary, but during the seventeenth century this monkish rule was relaxed, and they were permitted to marry. A disciple of Æsculapius, desirous of domestic bliss, could then take unto himself a wife, it is true, but only think of the imprudence of it! Such, at least, was the view taken by a worthy named John Jacob Treyling when inditing his thesis for the university of Ingolstadt in answer to the foregoing query. The passage runs as follows: "Accidit ad hoc viro præsertim medico, quod si juvenculam sibi junxerit, hancque formosam, habeat quod metuat illud Epicteti dicentis: Qui formosam duxerit, habebit communem. Cum enim medicus densâ praxi obrutus, nec domus nec uxoris custos esse valeat, quid? Si hæc interim hospitalis sit et Dianam æmulata cornificâ metamorphosi maritum cervinâ superbum coronâ in Acteonem transformat, heredesque ipse afferat, non nisi adamatico cum ipso sanguine conjunctos? Ita ut non semel saltem tacete secum murmurare querelus debeat: Haud ego mihi uxorem duxi, tulit alter amorem: sic vos non vobis." We fear the worthy John Jacob's Latin savours over-much of the canine variety, but nevertheless his meaning is intelligible. Whatever may be said of his argument as a whole, there is at all events little danger in these days of professional overcrowding that a medical man should become "obrutus densâ praxi"!

THE BACILLUS OF SYPHILIS.

THE whole etiological and pathological history of syphilis compels the conclusion that its virus, like that of tubercle and leprosy, is an organised one, and that bacteriology will one day reveal the microbe capable of such distinctive and permanent effects upon the human body. Lustgarten's discovery of a bacillus in the secretions of syphilitic ulcers, and even in tertiary lesions, has not been sufficiently widely confirmed to be regarded as solving the problem. It remains to be seen whether a similar fate awaits the latest alleged discovery of the syphilitic bacillus, which is described at length, with much additional speculation as to the bearings of the discovery, in a monograph by Dr. van Niessen of Wiesbaden.[1] The author is not a working bacteriologist, but, as he tells us, he is a neurologist, and it was the study of the immense part played by syphilis in nervous diseases which seems to have impelled him to make the attempt to discover the contagium vivum. Whatever may be thought of his work—and there is no doubt that it

[1] Der Syphilis-Bacillus. With 4 plates; pp. 92. Wiesbaden: J. F. Bergmann. 1896.

will be subjected to criticism by bacteriological experts—there is no denying that he has carried it on with enthusiasm and pushed it to its extreme conclusions. It is not easy to do full justice to his work in a brief notice; but it may suffice to say that in the examination of the blood of syphilitic subjects he found a micro-organism the characters of which seem to be of a most variable kind, although the main form is that of a bacillus, or, rather, diplo-bacillus, for it tends to occur in couples in the form of the letter V. But what is more singular still is that this organism does not persist in the schizomycetic group, but is capable of developing mycelial threads and spores which are characteristic of the hyphomycetes. Herein, we fear, will be found the initial difficulty to the acceptance of the bacillus as an entity; but it does not seem to strike Dr. van Niessen in that light, for he describes cultivations in various media, and points out that it is aerobic and liquefies gelatine. The best medium for its growth is blood serum. He next describes some experimental inoculations on the rabbit's ear by means of these cultures, which resulted in the appearance on the ninth day of a papule, the induration of which was suggestive. He further made observations upon the behaviour of the blood in presence of the bacilli, and found that when the latter—taken from a pure culture—were introduced into a drop of blood, and observations carried on from day to day, the bacilli were taken up by leucocytes, surrounded by vesicular masses of protoplasm, but never destroyed or absorbed, as in phagocytosis. Herein he finds an explanation of the persistence of the syphilitic virus and of the capability of its transmission from parent to offspring. He regards, therefore, syphilis as an infectious disease which can only be cured by measures not yet in contemplation, and discusses with an elaboration hardly justified by facts the application of antitoxin as the sole method open to procure immunity. Surely the premisses must be proved before such a conclusion is arrived at.

THE LATE COUNT TAAFFE

COUNT TAAFFE, the late President of the Austrian Ministry, was an Irish peer, being eleventh Viscount Taaffe and also Baron of Ballymote. His predecessor, the sixth viscount, gained distinction in the military service of Austria, and the family has ever since been domiciled in that country. Similar examples of voluntary expatriation are afforded by the families of the Earl of Newburgh and Baron Fairfax of Cameron in the peerage of Scotland, the former having been long settled in Rome and the latter in America. Some particulars of Count Taaffe's last illness have just been published by Professors Albert and Nothnagel. For the last twenty-five years he was a sufferer from chronic enteritis, which caused him terrible pain. Recovery was impossible, for he would not resign himself to the absolute repose enjoined by his medical advisers, and two years ago a chronic affection of the cardiac muscle was discovered. In July of last year the action of the heart became irregular, and some sequelæ occurred, such as dropsy. In October a thrombus obstructed the right femoral artery, causing gangrene of the leg; his appetite failed, and his life was prolonged only by the use of stimulants.

THE opening lecture of the session at the Brompton ospital for Consumption and Diseases of the Chest will be delivered by Dr. J. E. Pollock on Wednesday, Jan. 15th, at 4 P.M. The subject of the lecture will be Prognosis in Phthisis. We are requested to state that the course of lectures is open to all qualified members of the medical profession as well as to the students of the hospital.

THE authorities of Westminster Hospital propose to place a brass in the hospital chapel in memory of Nurse Margaret Allen, who died in the Luton Hospital from typhoid fever, which she contracted while acting as a nurse in the recent epidemic.

SIR MATTHEW WHITE RIDLEY will reappoint the committee which sat, upon Mr. Asquith's appointment, last session to inquire into the questions arising out of dangerous trades.

PROFESSOR EDWIN RAY LANKESTER has been appointed a vice-president of the Royal Society.

THE LANCET RELIEF FUND.

SEVENTH ANNUAL REPORT OF THE ALMONERS.

THE LANCET Relief Fund, which has for its Almoners the President of the Royal College of Physicians of London (Sir J. RUSSELL REYNOLDS, Bart., M.D., F.R.S.), the President of the Royal College of Surgeons of England (Mr. CHRISTOPHER HEATH), the President of the General Medical Council (Sir RICHARD QUAIN, Bart., M.D., F.R.S.), Mr. THOMAS WAKLEY, F.R.C.S., and Mr. THOMAS WAKLEY, jun., L.R.C.P. Lond., with Sir HENRY PITMAN, M.D., F.R.C.P., as Honorary Auditor, came into operation on the 1st of February, 1889.

In presenting the seventh annual report the Almoners think it well again to direct attention to the objects for which the Fund was established.

The Fund is sustained solely by the Proprietors of THE LANCET, who provide every January the sum of at least £300, and is administered free of cost, with the object of affording immediate pecuniary assistance to registered medical practitioners, or to the widows or orphans of members of the profession in cases of distress and emergency, by the grant of money by way of loans free of interest, or gifts, as the circumstances of the various cases may require.

When the Fund was inaugurated considerable misapprehension existed as to the precise objects for which it had been established; and, as a result, the majority of the earlier applications, being cases of *chronic* distress, and not coming, therefore, under the designation of *emergency*, could not be entertained. Attention was called to this fact in THE LANCET of Feb. 16th, 1889, in the following words:—

"We are requested by the Almoners to state that, from the character of a number of the applications received, both personally and by letter, for relief, it is evident that in many cases the object for which this Fund has been established is not quite clearly understood; and, if relief had been afforded in the cases of those who suffer from chronic distress, the Fund would have been completely exhausted within the first few days of its existence. They would therefore be greatly obliged if those readers of THE LANCET who may be asked to endorse applications would carefully peruse the Application Form and explain the precise object of the Fund to those applicants whose cases do not seem to come within the scope of the purpose for which the Fund has been established, which is to afford prompt aid to registered medical practitioners, or to the widows or orphans of members of the profession, who, in

consequence of the supervention of some unexpected exigency, which is not likely to recur, have pressing need of immediate and temporary pecuniary relief"—and who, it may once more be pointed out, are likely to be permanently benefited thereby.

The balance in hand at the end of 1894 amounted to the sum of £110 4*s*. On Jan. 2nd, 1895, the Proprietors of THE LANCET placed to the credit of the Fund the sum of £300. During the course of the year repayments of loans to the amount of £31 have been made. The sum of £363 has been granted in relief either by way of loan or of gift, leaving a balance of £77 19*s*. 10*d*. as per bank pass-book.

There have been considered altogether during the twelve months ending Dec. 31st, 1895, 56 applications for relief (the number the previous year having been 56). In 26 cases assistance was afforded, either as a loan or as a gift, according to the request of the applicant, the amounts of the grants ranging this year from £5 to £25.

In some cases of extreme urgency the application has been considered by the Almoners, the grant sanctioned, and a cheque for the amount forwarded to the applicant on the same day the application was received.

The following are extracts from a few letters received from some of the recipients of the Fund:—

270.—"Will you please thank the Almoners of THE LANCET Relief Fund for their great kindness in sending us £10. I cannot say how grateful we are, for without it we could not have kept a home."

275.—"I shall feel obliged if you will convey to the Almoners of the Fund my compliments and thanks for their kind help at a critical time."

276.—"Kindly inform the Almoners that I feel grateful for the cheque of £10 they have sent me this day, which I shall have pleasure in returning on the dates given in the agreement. I have also to thank you for your prompt attention in complying with my request."

285.—"I beg to acknowledge your letter and enclosed cheque, value £10. I hope and trust that it may be the means of Mr. ——— being able to make a fresh start. He will of course write to you himself."

285.—"I have read your letter to Dr. ——— and received the cheque for £10, the receipt for which I enclose. Accept my very sincere thanks for the kindness with which the Almoners have considered my case. I assure them of my gratitude, and I trust it will be a harbinger of better health and prospects. What I have suffered physically and mentally is a retrospect to be avoided, and if my impecuniousness be still further removed the paralysing sense of hopelessness which has hung over me like a pall will, I trust, dispel. Again thanking you for your generous gift, ..."

287.—"I am in receipt of your letter and enclosed cheque for £10, and I beg to return my most earnest thanks to the Almoners for their kindness. They little know what a help and relief it is to me."

293.—"I cannot express to you in words how thankful I am to such kind friends. The cheque will truly keep me. In all my sorrow I feel that God is sustaining me. Again thanking you for your great kindness, ..."

295.—"I thank you most heartily for your letter of to-day's date. The gift that has been so handsomely granted to Mrs. ——— will go a long way, I have no doubt, towards establishing her in some small business."

298.—"I shall be much obliged if you will convey to the Almoners my sincere thanks for their valuable aid at a critical time."

302.—"I beg to acknowledge receipt of your letter with enclosed cheque for £25, for which please accept my grateful thanks. It will prove of the greatest assistance to me and my family."

304.—"9 P.M.: Cheque for £15 safely to hand. Our heartfelt thanks to the Almoners for their great and most prompt assistance."

(Signed)

J. RUSSELL REYNOLDS. RICHARD QUAIN.
CHRISTOPHER HEATH. THOMAS WAKLEY, Jun.
THOMAS WAKLEY.

Statement of Accounts for the Year ending Dec. 31st, 1895.

DR.

	£	*s.*	*d.*
To Balance at Bank, Jan. 1st, 1895	110	4	0
,, Proprietors of THE LANCET	300	0	0
,, Repayment of Loans :—			
Case No. 186 ... ... £5 0 0			
,, 212 ... ... 2 10 0			
,, 52 ... ... 1 0 0			
,, 278 ... ... 5 0 0			
,, 276 ... ... 2 10 0			
,, 247 ... ... 3 0 0			
,, ,, ... 3 0 0			
,, ,, ... 3 0 0			
,, ,, ... 3 0 0			
,, ,, ... 3 0 0			
	31	0	0
	£441	4	0
To Balance at Bank	£77	19	10

CR.

	£	*s.*	*d.*	£	*s.*	*d.*
By Loans :—						
Case No. 276	10	0	0			
,, 278	20	0	0			
,, 282	5	0	0			
,, 290	25	0	0			
,, 296	10	0	0			
,, 302	25	0	0			
				95	0	0
By Gifts :—						
Case No. 263	10	0	0			
,, 265	10	0	0			
,, 270	10	0	0			
,, 271	5	0	0			
,, 273	8	0	0			
,, 275	10	0	0			
,, 279	20	0	0			
,, 280	20	0	0			
,, 281	20	0	0			
,, 283	10	0	0			
,, 285	10	0	0			
,, 286	10	0	0			
,, 287	10	0	0			
,, 291	15	0	0			
,, 292	15	0	0			
,, 293	25	0	0			
,, 295	15	0	0			
,, 298	10	0	0			
,, 301	20	0	0			
,, 304	15	0	0			
				268	0	0
,, Cheque Book				0	4	2
,, Balance at Bank, Dec. 31st, 1895				77	19	10
				£441	4	0

I find by the Bankers' Book that the actual balance on Jan. 1st, 1895, to the credit of the Fund was £110 4*s*., to which the sum of £300 was added by the Proprietors of THE LANCET on Jan. 2nd, 1895.

The balance at the Bankers' at the present date is the sum of £77 19*s*. 10*d*. I have also checked the receipts for disbursements and find the above account strictly accurate.

December 27th, 1895.

HENRY A. PITMAN, Hon. Auditor.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.

CHAPTER I.

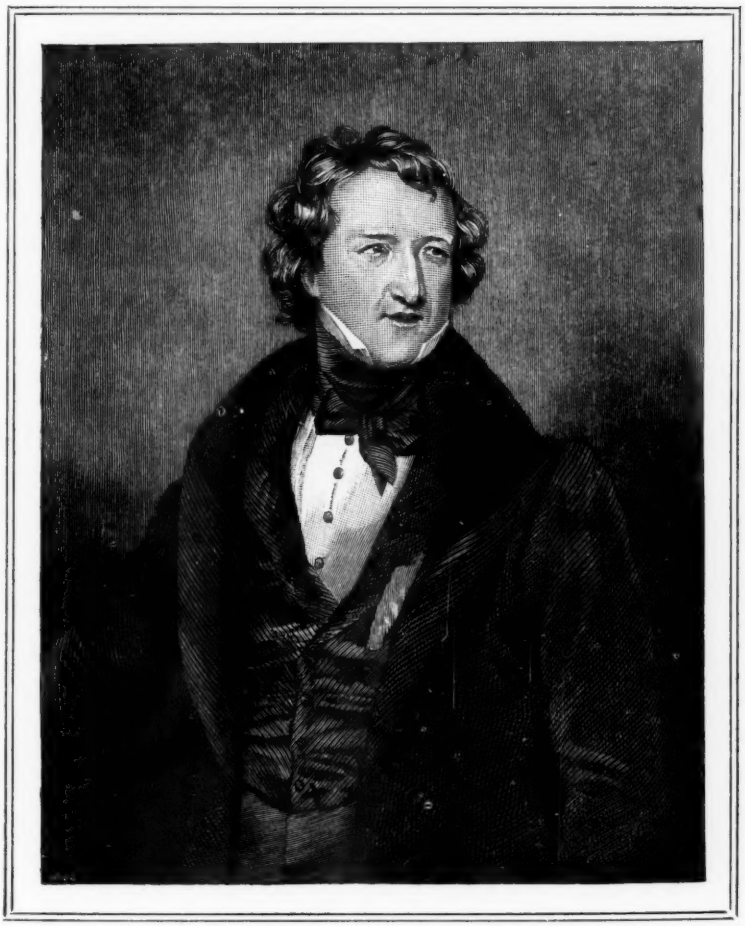
Birth and Family.—The Wakleys of Membury.—The Farmer's Son of the Period.—Middle-class Education at the beginning of the Century.—The Entry to a Medical Career.

THOMAS WAKLEY, the founder of THE LANCET, and the successful originator of reforms in medical politics to which are largely due the present high standard of medical education in Great Britain as well as the general stability of medicine as a career, and the public respect with which the members of our profession are everywhere treated, had no hereditary connexion whatever with the pursuits of his lifetime. He was the descendant of a long line of landowners, who gave their Saxon name to more than one west-country village, or adopted for distinctive purposes the appellation of their dwelling place as a name—for both proceedings were common in primitive times, the West of England in particular furnishing frequent examples. Wakerley, or Wakely, or Wakley—the three are variants of the same—is the name of more than one west-country village; and that a traceable connexion existed between the family of Thomas Wakley and one of the families who had resided since Saxon times upon the soil that bore their name is very credible, and was very generally credited by the neighbourhood.

Henry Wakley, the father of the subject of this biography, was born in 1750, and acquired by will a family property in the parish of Membury, on the Devonshire side of the border between that county and Dorsetshire, and a little south of the Somersetshire dividing line. He belonged to a class now largely extinct, but one which a hundred and fifty or even fifty years ago was still very powerful in the land. He was a large farmer, farming personally a holding which belonged to himself and hiring surrounding land generally on long leases, and treating it exactly as if it were his own property, subject only to an annual charge. The position of farming in England during the late Georgian and early Victorian ages made of such men a highly important class. Their private property, sometimes large, but more generally constituting but a small part of their holding, gave them an impregnable and dignified position. Their calling was a substantial and lucrative one. Many of them belonged to the oldest families in the neighbourhood, the homestead having been the headquarters of the family for generations—and this was the case with the Wakleys—while their pedigrees showed intermarriages with their greater neighbours whose rise in the social scale from yeomanry, through squirearchy, into the peerage was a theme of humorous respect among them. For the gulf between yeomanry and squirearchy was not a broad one, and was frequently bridged by a lucky marriage, a little commercial success, or some extra keen attention to agriculture on the part of a shrewd occupier. It was in this class that Mr. Henry Wakley was born, and in it he died at the great age of ninety-two, having established for himself more than local reputation for his knowledge of agricultural affairs. He was the most respected authority on things agricultural in his county and the two adjoining counties of Dorsetshire and Somersetshire, the inevitable arbitrator in disputes, and the universally trusted counsellor in times of need. He was a Government Commissioner on more than one occasion for the Enclosure of Waste Lands, and, at one time, was among the most extensive occupiers of land in Devonshire.

Mr. Henry Wakley had eleven children, eight sons and three daughters, and of the sons Thomas Wakley was the youngest. He was a just but severe parent, the very type of man to rule a large family. He gave his orders and exacted obedience of them from all; and as his position of master was unquestioned his family had no feelings towards him that were other than respectfully affectionate. In those days the sons of the practical farmer were employed on the farm. They oversaw, and if necessary did an ordinary day's work like any other man on the land. In time they went about their business or professions, but while they were at home they made themselves useful. It was in this old-fashioned patriarchal mode of life that Thomas Wakley spent his boyhood, and to the frugality, self-denial, and open-air exercise that it enjoined upon him he owed, no doubt, his great bodily strength, as he certainly owed the taste for country sports that he manifested later in his life. For they were a great sporting family, renowned through the country side for their skill with the gun and their judgment of horseflesh, so renowned that their fame is not dead yet. The three elder brothers were remarkably good shots, and the eldest of all carried on a highly successful business in horse-breeding on the farm. Mr. Henry Wakley, the father, was an ardent hunter. He rode regularly to hounds and with a pack of harriers, and about the latter, the Cotleighs Harriers, it is an interesting fact that the pack is still in existence and under the same family mastership that it was in the days we are writing of. Not long before his death Mr. Henry Wakley issued a challenge to all comers of his own age to ride a steeplechase "over a fair hunting country," mounted on a horse as old as his own. At that time he was over ninety years of age and his favourite horse was thirty-three, so that it is not surprising that the gauntlet was never taken up. In such a household it is not surprising that young Wakley grew up an active boy. He would be up at sunrise, and, if necessary, ride the horses to the plough. And though, doubtless, the task was not one of direct compulsion, but undertaken rather because it pleased the active boy to do it, yet it will be remembered that if he had done it under his father's orders, because no other plough-boy was employed, he would only have been doing what the sons of scores of other landowners were doing daily in Devonshire, and also in more advanced parts of England, more directly under the scope of urban influence and more aware that the schoolmaster was abroad.

Although brought up in this simple and hardy manner it must not be supposed that Thomas Wakley's education was neglected. On the contrary, he was sent to the best grammar schools in the neighbourhood—viz., that of Chard in Somersetshire, an endowed and very ancient school, and that of Honiton in Devonshire, one of the best-known schools in the west of England. Chard lies about six miles north-east of Membury, and Honiton about ten miles west. To go to a boarding school was, at the end of the last century or beginning of this, almost a thing unknown to the middle classes. The Royal colleges of Eton and Winchester and six or seven other of the great public schools had reputations other than local, and so had become the great boarding institutions that they are now; but the usual middle-class lad was educated at the nearest grammar school. As a consequence his education was prone to suffer much from the weather. A valley blocked with snow or a swollen stream would cut the young scholar off from his school for a week. Now the neighbourhood of Membury abounds in rich valleys, and these, with their fertile loam soil and its subsoil of gravel, while forming an ideal foundation of pasture, easily became difficult of transit for a boy on foot or a pony. So that whether young Wakley sought instruction from the north-east at Chard, or the west at Honiton, he was always liable to be compelled to play truant by the inclement condition of the country over which he had to travel. Lighting



Thomas Wakley

also was expensive ninety years ago, and midnight study was not encouraged; nor would a lad, the youngest in a household devoted to country pursuits and rising in the early grey of the morning, feel very disposed to prolong his studies far into the night. And, to add to these hindrances to over-study, there was nothing of the bookworm about the boy. That he made good use of his opportunities is undoubted, because no mind could have been so receptive, no wit so adaptable as his proved to be in later years, if their owner had not been trained to learn and taught to listen. But in mere book-learning Thomas Wakley did not excel. His education was sound in that it fitted him to go on learning when he found himself face to face with the problems of life. He laid as a boy a solid foundation upon which to build a more elaborate education, and this with great critical acumen in his selection of materials and a real appreciation of the good and lasting in literature he proceeded to do. His writing and public speaking alike bear testimony in this direction.

When quite young he more than once expressed a desire to go to sea. He knew nothing of seafaring life. It is true that Membury is but eight miles from the channel coast, and that from the castle heights the bay of Lyme Regis can be seen spread out before the eye; but Membury was a purely agricultural place, with a purely agricultural population, and young Wakley's desire, which was real and not a mere idle expression of a passing fancy, must have been spontaneous in origin, and not inspired by any of his immediate surroundings or companions. It was an early example of his independence of thought. He obtained his desire, for when still quite young he took a voyage to Calcutta in an East Indiaman with his father's reluctant permission. It was not intended that this should be his entry into the career of a mariner, for he travelled as a *protégé* of the captain, who was the personal friend of his father. Whether, his curiosity assuaged, he would have abandoned the sea as a profession is only a subject of speculation, but it is difficult to conceive a boy with his restless, arguing, inquisitive temperament settling down to life in the merchant service, with its great demands upon patience, and its necessarily unquestioning obedience and resignation. Anyhow, circumstances worked against this voyage being a prelude to a career as a sailor, for on the return journey his friend the captain died, and there was no longer any inducement to the boy to remain with the ship. He came home and returned to school, and no one heard anything from that time of his experiences on the voyage save that he is, in a newspaper article found in an old scrap-book of his, reported to have said, in answer to an inquiry why he had not brought his chest back, that he thought he had had quite enough to do to take care of himself. Life in those days was rough on board a merchant ship, as rough as, or rougher than, it was on board a man-of-war, and what that means is more than hinted at in several passages of Marryat's famous novels.

His new school was at Wiveliscombe, in Somersetshire, and there he remained until his choice of a future was made. It fell upon medicine. So at fifteen years of age he was duly apprenticed to a Mr. Incledon, an apothecary at Taunton, that being the very usual method in those days of commencing professional studies. For it must be remembered that before 1815, which was the date of the passing of the Apothecaries Act, the curriculum of the medical student was very vague. Previously to the passing of that Act it was not illegal for any unqualified person to practise medicine, and as a consequence there were very many people working in the medical profession who were believed by their patients to be duly qualified medical men, but who had undergone no training and been subjected to no tests. Their education had consisted either of apprenticeship to a licensed apothecary or of a few months' discharge of the duties of dispenser to an unqualified practitioner. As it was not always possible to forecast the future of a lad, it was usual to send him to an apothecary first as an apprentice. If he did not show any remarkable aptitude or desire any further education, that might suffice, and he could continue on the lines of his master. If, however, he desired to fly at higher game, or his parents desired it for him, he could afterwards be sent to London, Edinburgh, or Dublin, to walk the hospitals and take a diploma. This both Thomas Wakley and his parents wished, and he did not complete his time with the Taunton apothecary, but was transferred to his brother-in-law, Mr. Phelps, a surgeon of Beaminster, as a pupil. From Mr. Phelps he went to Mr. Coulson, a member of a well-known medical family at Henley-on-Thames, as assistant, and eventually, in 1815, went to London as a student of the United Schools of St. Thomas's and Guy's.

With his start in London as a medical student his real life-work began. Hitherto he had been under the supervision of parents, elder brothers and sisters, schoolmasters and other masters, and what he did and the way in which he did it were necessarily not left to his free choice. But in London he was alone, free to work or play, free to behave or misbehave, free to rise if he would, and equally free to fall. The real life of Thomas Wakley dates from the moment when his individuality for the first time received play, but the circumstances of his younger days, which we have briefly touched upon, exercised an influence upon his future which was often, as will be seen, easily traceable. To his country bringing-up he owed the simplicity and bluff directness that stood him in such good stead in controversy, and to it must be attributed the wonderful physical strength and keen vitality that enabled him to work at enormous pressure for hours together with no diminution of zeal or interest. To it also he owed his hatred of all shams. His youth had been spent among a simple folk, to whom truth was everything, and in whose eyes the pretender was a particularly obnoxious person. His position in his family must also be remembered. They were a fine and jovial set of sporting men and handsome women—his brothers and sisters—and his life in contact with a large and unprejudiced group of his seniors gave him from the first a certain assurance; but he was junior among them, and the fact would temper the assurance, for there were no keener critics of manners and no stricter disciplinarians than the elder sister and the big brother. He was especially under the influence of his second sister, the wife of the rector of the parish, Mrs. Newbury by name, to whom he was devoted. In his controversial moments later—and these were controversial, indeed—whatever his pen might have written his personal manner towards his opponents was blameless and his mental attitude inflexible. This combination of firmness with good-tempered courtesy he had learned in his country home; his environment there had taught him that it was good policy, and his sister had taught him that it was the right way to behave.

When Thomas Wakley came to London he was well equipped, his physical condition was admirable, of book-learning he had a sufficiency, while his moral character had received the very training best calculated to enable it to deserve and attain success.

The portrait which we publish this week depicts him at the age of forty. It is reproduced from a painting by K. Meadows, engraved by W. H. Egleton.

MEDICAL MAGISTRATE.—Mr. William H. Jalland, F.R.C.S., L.R.C.P. (the Sheriff of York), has been placed on the Commission of the Peace for the North Riding of Yorkshire.

THE LANCET
Analytical and Sanitary Commission
ON
DANGEROUS PARAFFIN LAMPS.

THE following paragraphs appeared in the daily papers of Dec. 28th and 30th, 1895:—

"GIRL BURNED TO DEATH.—Another case of the danger of cheap paraffin lamps came before the coroner at Hampstead yesterday, when an inquest was held on the body of Jane Venables, a girl eight years of age. The mother said that on Sunday afternoon they were looking at some pictures with a lamp on the table which cost a penny. It consisted of a glass bowl with a piece of tin for a burner. By accident it was overturned and the little girl was frightfully burned. She was at once taken to the hospital, and on Tuesday last she succumbed to the injuries. The coroner commented on the danger attaching to these cheap lamps, and said the authorities should take some steps to prevent the sale of them. The jury returned a verdict of 'Accidental death.'"

"Early yesterday morning a sad affair occurred at Canterbury. A woman named Wood, living at a house in a poor quarter of the city, was the last of the family to retire to bed. Her husband and daughter were startled by screams and found her at the bottom of the stairs in flames. A broken lamp was by her side, and had either exploded or fallen from her grasp. She expired just as the flames were extinguished and was frightfully burnt."

The list of disasters which have been published in the daily papers during the last twelve months, and of which the above, occurring very recently, are now a painfully familiar type, is a terrible one. It abounds in horrifying details, calculated to strike terror and alarm into the minds of all those in the habit of using paraffin lamps and to make them fearful of continuing their use. No less than 284 lamp accidents have been investigated during the year, of which, according to the annual report, recently issued, by the chief officer of the Public Control Department of the London County Council,[1] 31 were fatal, involving the loss of 33 lives. Serious as this result is, it does not represent anything like the full extent of the accidents which, though narrowly imperilling life, have resulted chiefly in serious damage to property by fire. Thus during the year 1894, to quote another paragraph of the report, the fire brigade were called to no less than 448 fires reported to have been caused by lamp accidents. Of these, 90 are ascribed to explosions and 337 to the upsetting of lamps. These figures, of course, exclude accidents in the provinces, which, if included, would enormously swell the calamitous catalogue. Not included, again, in these numbers are a large number of small fires reported to the insurance companies where the fire brigade do not attend, and where the damage does not usually exceed £5. The risks to life attending such occurrences are, however, great, and it is stated that these small fires exceed in number all reported cases, which in 1894 were 3061, and that at least one-half of them are caused by petroleum oil lamp accidents. These statistics surely fully justify the remarks of the chief officer that "a very serious and alarming danger is ever present in the thousands of houses in London where cheap and unsafe lamps are in use."

With the very firm conviction in our minds that something ought at once to be done in the interests of common humanity by legislative measure to stamp out this appalling cause of danger, we have set ourselves the task of finding out as far as possible in a practical way as to what this danger is due and how it may be averted. Is it due to the lamp, the oil, or both? The results of the following simple experiments, which we now publish, afford, we venture to think, some answer, at any rate, to each of these questions. In the first place, it is important to consider what are the properties of the oil commonly used for lighting purposes, and next what are the structural features, good or defective, in the lamps in which this oil is burned. The purchase of both oil and lamps was therefore the first step. Neither the lamp nor the oil that would be likely to give the worst results was sought, but both were purchased just as an ordinary individual would purchase them for household use. For this reason expensive lamps were not obtained, but, as far as could be ascertained, those were obtained which are most in demand by the poorer classes, who doubtless think to economise by buying the cheapest article. We are perfectly satisfied that the lamps purchased were of the type that the poorer classes buy, since in some instances poor people came into the shops at the very same time and purchased a lamp identical in pattern and price. Moreover, a peep into some of the houses in the district where the lamp was bought convinced us that our purchase fairly represented the majority of the lamps used, since similar ones could be seen on the table in the rooms of the houses of the same neighbourhood. The Italian warehouseman or the man who sells oil is generally the man who is responsible for the sale of lamps to the people of a poor district. It is he who supplies new wicks to the lamps and provides them with new chimney glasses. Occasionally, but only occasionally, a lamp shop or china and glass shop is the place where lamps may be purchased, but in this case it is not usual to supply the oil or to make good the wear and tear of wicks, chimneys, &c. The prices paid for the lamps experimented with varied from 1*d*. in the case of hand lamps to 2*s*. 11½*d*. in the case of lamps for the table. The tour made by our Commissioners for the object of purchasing these lamps round the poorer districts of London brought to light one fact. No matter in what part of London the purchase was made, four or at most five types of lamps were all that could be obtained. These districts included the New Cut, Lambeth, Seven Dials, Drury Lane, the slums of Westminster, Whitechapel, and Clerkenwell.

A fairly accurate idea of these lamps will be obtained from an inspection of the picture below, which is reproduced from a photograph of the group experimented with. (Nos. 19, 20, and 21 were not purchased, but were taken from a private dwelling-house as examples of more expensive lamps in very general use.) As will be seen, there are in reality but five types of lamps amongst these, although they were purchased in various parts of the metropolis. The oil was purchased at an ordinary oil shop at a cost of 7*d*. per gallon. It was the next best quality to "water white." It proved, on testing, to have a flashing point of 75° F. (Abel's test), equal to a flashing point of about 105° in open vessels. Its specific gravity was 0·825 at 60° F. On distilling the oil it commenced to boil at 300°, 10 per cent. being collected at this point. The temperature then gradually rose, successive 10 per cent. fractions being obtained, until it was considerably above 400°, at which the whole of the remainder came over.

For convenience the lamps may be classified as follows:—

1. Small glass hand lamp, No. 22 in the illustration, to be found in use in almost every small house, with tin reflector and round chimney, wider at the base and having a small rod-like wick, the burner simply fitting over the mouth of reservoir without screw. Price 1*d*.

2. Glass hand lamps in various colours, flat wick, with brass cap and slit, pear-shaped chimney. See figs. 4, 5, 10, and 13. The last two were broken so that only the burners and wicks are shown. Prices from 4*d*. to 10*d*.

3. Hand lamps, brass circular burners. See figs. 16 (handle broken) and 6. Prices 1*s*. 6½*d*. and 1*s*. 9*d*. respectively.

4. Table lamps, china or glass reservoir in various colours and patterns, screwed to bronze metal base; flat wick, pear-shaped chimney. A very common form of lamp in very general use. See figs. 1, 8, 9, 14, 15. Prices ranging from 9½*d*. to 1*s*. 3*d*.

5. Table lamps constructed entirely of opal glass known as alabaster; a very popular form of lamp. Circular burners, round chimney and shade. See figs. 2 (broken) and 12; prices, 1*s*. 5½*d*. and 1*s*. 8*d*. respectively.

A more detailed description of each individual lamp is given in the account of the tests to which each was submitted. The experiments were of the simplest possible kind.

In the first series of experiments (A) the lamps were attached by means of clamps to an upright rod of iron connected at its base with a long iron spindle, at the other end of which was a handle, convenient for tilting the lighted lamp in any position. The spindle was made long enough to avoid any risks to the experimenter. In the second series of experiments (B) a draught of air was forced down the lamp when alight and under varying conditions. Finally, the lamp was knocked over (C) from a wooden platform not more than two feet high on to the ground, and in two instances (hand lamps with glass reservoirs, the surviving burners and wicks of which are given in figs. 13 and 10) on to the flag paving. We append the results in as brief a form as possible, together with other observations

[1] Annual report of the Chief Officer of the Public Control Department of the London County Council, 1894-95. Sold by Edward Stanford, 26 and 27, Cockspur-street, Charing-cross, S.W. Price 8*d*.

which may throw some light as to the possibilities of accidents. These experiments were repeated with the oil and reservoir warmed to 100° F.

Lamp No. 1.—This was a lamp purchased in a poor W.C. district, consisting of an amethyst-coloured glass reservoir screwed to a metal base; the chimney was pear-shaped, the wick flat, fitting imperfectly in the wick-tube, brass cap and slit. Distance of flame from oil reservoir two inches. The screw connecting burner to reservoir was moderately good, one turn and a quarter sufficing to disconnect the two. (*a*) Lamp, after an hour's burning, turned through a right angle, chimney fell off, oil escaped and instantly ignited in large flames round burner, and in a few seconds oil trickled out of reservoir and dropped in flames on the ground. On making the chimney quite tight and repeating the experiment the result was not nearly so serious. On turning the lamp completely over the chimney fell off and oil escaped rapidly and burst into flame; pieces of oilcloth beneath were soaked and ignited, and the flames were very difficult to extinguish. The flames around the reservoir rapidly heated the oil inside, which escaped in dense, white fumes, which, on one occasion, ignited with violence. (*b*) On blowing down chimney no serious result; flickered and smoked, but finally extinguished. (*c*) Knocked off wooden platform, chimney came off, oil rapidly escaped and burst into furious flame. These experiments were repeated with the oil in the reservoir at 100° F. The results were practically the same and did not appear to be any more serious.

Lamp No. 2.—A so-called "alabaster" lamp with circular wick, burner came off from reservoir on turning the screw half a turn only, with very imperfect thread; the wick in the reservoir was flat, but assumed the circular form on being screwed into burner tube; there was distinct space, however, between the opposite edges of the wick in the tube, forming a hole connecting the space of the reservoir with the outside air. The lamp was extremely light and easy to upset. (*a*) On turning the lamp, which had been alight one hour, through a right angle the oil leaked out very rapidly and put out the flame. The chimney kept on, but on or off it did not appear to make much difference. On turning the lamp right over the result was the same. These experiments repeated wihe the oil in the reservoir at 100° F. were much more serious, the oil then escaping in flames, the reservoir rapidly emptying, so bad was the leakage. (*b*) On blowing down the chimney no serious result happened, despite the existence of a space between the edges of the wick as pointed out above. (*c*) Knocked off wooden platform the lamp broke at the base of reservoir, as shown in the illustration, which immediately emptied, the oil ignited, and quite half a pint was on fire. It was exceedingly difficult to extinguish, and cloth saturated with the oil baffled all attempts at extinction. Owing to the breaking of the lamp the experiment of upsetting it when the oil was at 100° F. could not be tried.

Lamp No. 3.—Tin wall lamp frequently to be found hanging on the walls of the passage of small houses. Pear-shaped chimney kept in position by a projecting piece of tin with perforation. Flat wick; brass cap and slit; thread of burner imperfect; turns one and a half times to come off; flame two inches from reservoir. (*a*) After burning an hour the lamp was turned through a right angle with the result that, despite a serious leakage of oil, there was no ignition. On turning it completely over the result was the same; the flame went out and the oil leaked considerably. In both instances the chimney kept its position. (*b*) No serious result followed on blowing down the chimney. (*c*) Upset on wooden platform, falling to the floor two feet; chimney was displaced, oil freely flowed out and ignited. These experiments repeated with the oil and reservoir warmed to 100° F. were the same in effect.

Lamp No. 4.—Hand lamp, ruby glass reservoir, bought in Westminster; pear-shape chimney, flat wick, burner fitted with brass cap and slit; flame from oil two inches; moderately good thread to burner, the screw requiring one and a half turns to be detached from reservoir; price 10*d.* (*a*) Turned over at right angles after it had been burning one hour, oil freely escaped and ignited; the chimney remained in position. This lamp was accidentally dropped when not alight; the handle came away from reservoir, leaving two holes, out of which oil escaped. Further experiments were therefore impossible.

Lamp No. 5.—Hand lamp with white glass reservoir, bought in the New Cut, Lambeth, for 6½*d.*; burner had brass cap with slit; pear-shaped globe; thread of screw on burner moderately good; on one and a half turns it became detached from reservoir. (*a*) After burning one hour turned over at right angles, oil rapidly escaped and burst into flame. On restoring lamp to upright position flames shot out of the chimney with a roaring noise, oil being scattered in all directions, flaming fiercely. The result was similar on turning the lamp right over. (*b*) Blowing down the chimney after one hour's burning simply put the flame quietly out. (*c*) Upset on edge of wooden platform the results were just as serious as described in (*a*). On repeating these experiments with the oil at 100° F. the results were practically the same.

Lamp No. 6.—A brass hand lamp, with circular wick; screw fittings fairly good, burner screw turned one and a half times before it could be detached from reservoir. (*a*) Turned half over, chimney remained on, and flame went out in spite of serious leakage of oil; when chimney was loose oil round the wick ignited, and ignited oil escaped—turned right over with both loose and tight chimney flame went out, although leakage of oil was serious. (*b*) Blowing down the chimney effected no serious result. (*c*) On the lamp falling from platform to floor the chimney became detached, and the wick flared seriously, the flames playing round the reservoir in a dangerous manner. As it was it could be easily put out. Experiments repeated with oil and reservoir warmed to 100° F. the same.

Lamp No. 7.—This lamp was bought in a crowded and poor district in Westminster for 2*s.* 11½*d.* It consisted of a brass stand and cap containing a glass reservoir with protective brass top; the wick was circular and the flame quite three inches and a half distant from the oil; the thread of burner screw was fairly deep, two turns of the screw being necessary to detach it from the reservoir. (*a*) Although the reservoir and burner fell out of the cup-shaped base on turning this lamp at right angles after it had been burning an hour, yet no serious result followed, despite the excessive escape of oil; the flame was put out and the glass reservoir did not break. (*b*) Blowing down the chimney simply extinguished the flame. (*c*) The lamp on being upset behaved as in (*a*). The experiments repeated with the oil and reservoir warmed were substantially the same.

Lamp No. 8.—Table lamp with opal reservoir and coloured designs attached to metal base, bought in the neighbourhood of Drury-lane. Price 1*s.* 1*d.* Pear-shape chimney, brass cap with slit; very imperfect thread on burner screw, coming away from reservoir on three-quarter turn, and on one occasion the reservoir fell away from burner on merely carrying the lamp; flame half an inch from reservoir. (*a*) After an hour's burning the lamp on being turned to a horizontal position gave no very serious result so long as the chimney was in position. When the chimney was loose the oil escaped freely and ignited. The same result was obtained when the lamp was turned right over. (*b*) A draught down the chimney extinguished the flame. (*c*) The lamp on falling from a platform to the ground leaked very badly, the chimney fell away, and the oil escaped in every direction in fierce flames. Reservoir did not break. The results were of the same character when the oil and reservoir were warmed to 100° F.

Lamp No. 9.—This lamp was purchased in a busy street in Westminster for 1*s.* 3*d.* It is a form very commonly used, consisting of a blue glass reservoir screwed to a metal base; it had a pear-shaped chimney and flat wick, brass cap and slit; the screw of burner was fairly good, one and a quarter turns being required to detach it from reservoir; the flame was 2 in. from reservoir. (*a*) Results of turning lamp at right angles as well as completely over were not serious as long as chimney remained on, but when chimney was loose the oil flared round the reservoir, making it hot and expelling more oil, which vaporised and ignited violently; doubtless after some time the glass reservoir under these circumstances would fly to pieces. (*b*) There was no serious occurrence on blowing down the chimney. (*c*) On being upset from platform to the ground the chimney came off, and the oil flared alarmingly round the wick; and after a time a big roaring flame proceeded from the burner. The experiments with the oil and reservoir at 100° F. gave the same results.

Lamp No. 10.—A cheap glass hand lamp, bought in the neighbourhood of Seven Dials, price 6½*d.*, purple coloured glass reservoir, and in other respects the same as 4 and 5. (*a*) No very serious result followed the turning over of this lamp either completely or half-way; a few drops of oil escaped, but the flame went out in either case with the chimney on or off. (*b*) Blowing down the chimney produced

no serious effect. (*c*) On knocking the lamp over much oil was spilt and ignited, the chimney being broken, but not the reservoir. On dropping this lamp alight on stone paving the reservoir smashed, and instantly the escaping oil burst into flame. The experiments of blowing down the chimney and turning the lamp over lashed to an upright rod were productive of the same results when the oil and reservoir were heated to 100° F.

Lamp No. 11.—A hand lamp bought in the neighbourhood of the New Cut, price 8½*d.*, consisting of a metal reservoir and saucer attached, painted red. Flat wick; brass cap and slit; pear-shaped chimney; badly fitting screw, one turn of which detached burner from reservoir; flame two inches from reservoir. (*a*) After an hour's burning the lamp was turned half over and then right over, with the result simply of the flame going out and with but a small leakage of oil, the chimney remaining in position. With a loose chimney the results were quite different; oil escaped and flamed round the wick, and in a few seconds, owing to the heating of the reservoir, oil was forced violently out, shooting flames in every direction. (*b*) Blowing down the chimney caused the flame to go out quietly. (*c*) On knocking the lighted lamp off platform on to the ground the chimney came off, oil escaped and flared in every direction. The results were the same with the oil and reservoir at 100° F.

Lamp No. 12.—This was an "alabaster" lamp bought in the New Cut, Lambeth, for 1*s.* 5½*d.* It had a circular wick and was in construction identical with No. 2. Unlike No. 2, however, it did not break in the course of the experiments. The flame was 3½ inches from the reservoir. The thread of burner-screw was fairly good, and one and a half turns were required to detach it from reservoir. This lamp is very light and easily upset. (*a*) After burning one hour the lamp was turned into a horizontal position with the result that the chimney kept on and the light went out. On turning the lamp right over, oil rapidly escaped and fell out in sheets of flame, the chimney being still in position. When the chimney fitted loosely the results were much less serious. (*b*) On blowing down chimney after one hour's burning no serious result was observed. (*c*) On falling off platform the chimney broke and the flame went out (the lamp did not break, as in the case of No. 2). The experiments repeated with the oil reservoir warmed to 100° F. were not widely different in results.

Lamp No. 13.—A lamp of the same description and price as 4 and 5, purchased in Whitechapel. (*a*) Proved to be most dangerous under all circumstances; oil rapidly escaped on turning the lighted lamp half over and freely ignited, and big sheets of flame proceeded out of the chimney, scattering flaming oil in all directions. The flames were very difficult to put out, especially where the oil had soaked into some old carpeting. (*b*) This lamp, strange as it may appear, gave no serious result on blowing down the chimney, even when the oil was at 100° F. (*c*) On knocking off platform the result was most dangerous, flaming oil being scattered in every direction. The results were not accentuated when the oil and reservoir were first heated to 100°. Finally, the lamp was dropped alight on hard stone; the glass reservoir smashed, and the escaping oil instantly ignited.

Lamp No. 14.—Purchased in the neighbourhood of Seven Dials, price 1*s.* 2½*d.*; purple-tinted glass reservoir on heavy metal base; moderately good screw to burner, which turned one and three quarter times to become detached from reservoir; flat wick; brass cap and slit; pear-shaped chimney. (*a*) On turning this lamp through a right angle after it had been burning an hour chimney remained on, oil leaked seriously; but the flame went out when, the chimney being loose so that it came off, the escaping oil burst into flame and was very difficult to extinguish; turning the lamp right over gave the same result. (*b*) On blowing down chimney the flame flickered, smoked, and went quietly out. (*c*) On upsetting this lamp from the platform oil escaped and flared furiously. Reservoir did not break. The results were much the same when the oil and reservoir were first warmed to 100° F.

Lamp No. 15.—Of the same description as last, bought in Whitechapel, price 9½*d.*; very faulty thread on burner screw, one turn sufficing to detach it from the reservoir. (*a*) This lamp on turning half over leaked very badly, but when the chimney remained on flame eventually extinguished. When the chimney was loose the wick flared alarmingly, all escaping in flaming drops. On turning right over with the chimney on, the flame went out, but with a loose chimney the oil escaped and flared furiously, dropping in sheets of flame below. (*c*) Blowing down the chimney was without serious result. (*c*) On falling from platform to floor the chimney came off, oil spilt in serious quantities and flared up in a dangerous way. On repeating these experiments with the oil and reservoir warmed to 100° F. the results were similar.

Lamp No. 16.—Bought in the neighbourhood of Lambeth, price 1*s.* 6½*d.*, and similar to No. 6. A round brass lamp with handle attached, which broke after a time, the weight of the lamp when full being more than the cement could stand. (In the illustration the broken handle is resting on the reservoir of the lamp.) Circular wick and burner the same as No. 6. Badly fitting screw to burner, requiring one turn and a quarter to detach it from reservoir. (*a*) After one hour's burning the lamp was turned at right angles, with the result that the chimney kept on, and suddenly a sheet of flame shot out of the chimney with considerable violence, ignited oil continuing to pour out. When the chimney was loose so that it fell out the flame simply went out. (*b*) Draught down the chimney put the flame out quietly. (*c*) On upsetting the lamp from the platform it went out. These experiments repeated with the oil and reservoir warmed to 100° F. were followed with very similar results.

Lamp No. 17.—Lamp bought in Whitechapel, price 1*s.* 9*d.* All brass; flat wick; loosely fitting brass cap and slit; pear-shaped chimney, burner screw fairly good, requiring one and a half turns to be detached from reservoir. Reservoir provided with screw filler. Lamp very light and easily upset. (*a*) Turned over right angles, chimney remaining on, flame went out; with loose chimney, and falling out, oil burned quietly round wick; the leakage was small, the oil escaping without appearing to ignite. On turning right over the chimney dropped out, oil flared round the wick and heated the reservoir seriously; it could, however, be easily extinguished. (*b*) Blowing down chimney simply put flame quietly out. (*c*) On knocking lamp off the platform to the ground oil spilt all over the place and burnt furiously. The results were the same when the experiments were repeated with the oil and reservoir heated to 100° F. It should be observed that the oil in lamps constructed entirely of metal is, after an hour's burning, at a temperature of at least 80° F.

Lamp No. 18.—A safety hand-lamp, all metal, purchased in Westminster, price 6½*d.* An S-shaped wick tube projects nearly to the bottom of the burner, so that when the lamp is upset the flame cannot possibly reach the reservoir, neither can the oil escape to any serious extent or faster than it will flow through the flat wick, which fits very well. The S-shaped tube serves, in fact, as a trap, like the traps used for drain-pipes, only on a much smaller scale. One fault of this lamp is its very small base compared with the circumference of the body of the reservoir; in other words, the slightest knock upsets it. Another is the manner of attaching the wick-burner to the reservoir, which is by means of a bayonet catch. Assuming its safety, there is no reason why safety should not be made doubly secure by improving these points of construction. (*a*) On turning the lamp half over the flame gradually went out, either with the chimney remaining on or falling off. On turning it right over a small flame lingered for a while about the wick, but eventually went out. In no case was there the slightest leakage. (*b*) Blowing down the chimney simply put the flame out. (*c*) The results of upsetting this lamp were precisely the same as in Experiment (*a*). On warming the oil and reservoir to 100° F. the results were also the same. The lamp is probably safe, but it would be better to modify its construction in accordance with the observations made in a preceding paragraph.

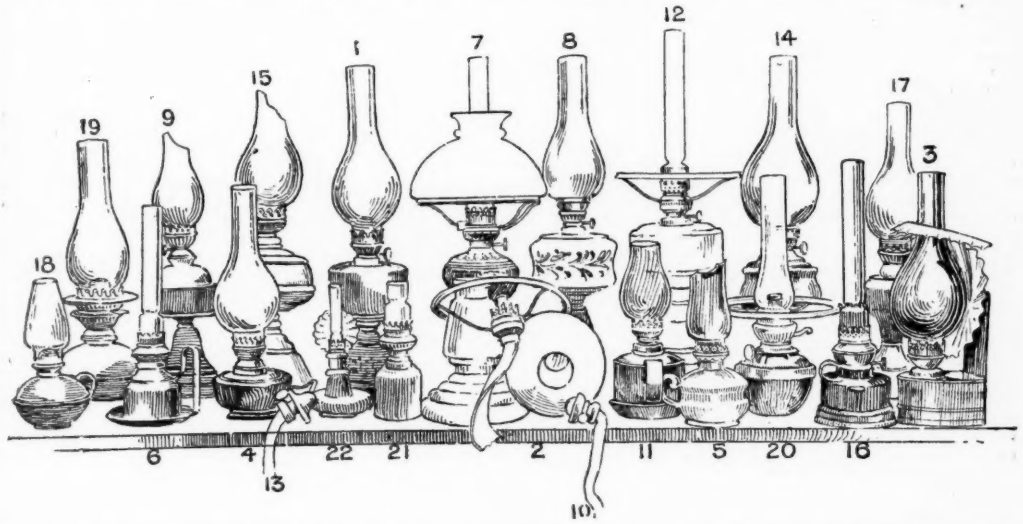
Lamp No. 19.—A large lamp with two flat wicks and extinguisher, and lever for raising chimney, attached to a drawing-room stand lamp. Reservoir of copper. Burner connected to reservoir by means of bayonet catch—as will be seen, a very faulty arrangement, and one which should be replaced by a good screw. Wicks three inches and a half from reservoir. (*a*) On turning this lamp half over the extinguisher became fixed and failed; very serious results followed, owing to a leakage between the reservoir and burner, and owing also to the burner becoming detached from the reservoir. In a very short time close upon half a pint of oil rushed out of the reservoir and instantly ignited, scattering flame in all directions. The flames from the lamp and of the spilt oil were put out with very considerable difficulty. (*b*) On blowing down the chimney no serious occurrence happened. (*c*) On knocking the lamp from the platform the results were just as dangerous as in Experiment (*a*). The experiments repeated with the oil and reservoir warmed to 100° F. were substantially the same.

Lamp No. 20.—A lamp used in the library of a private house. Part of the air-supply comes up the tube through the reservoir; it has a circular wick fitted over a brass tube, ending at the top in a perforated cylinder and spreader. The lamp is provided with an extinguisher, which is a cylinder of metal which closes completely over the perforated cylinder and thus immediately stops the access of air. (See illustration, Lamp 20.) Wick completely filling wick tube, burner attached by means of well-cut screw requiring at least three good turns before it could be detached from reservoir. Reservoir metal and provided with screw filler. (*a*) On turning the lamp half over the chimney remained on, and the extinguisher acted at once and put the flame out, though there was a slight leakage of oil. With the chimney loose, so that it fell out, the result was just as satisfactory. On turning the lamp right over the flame was completely extinguished. (*b*) On blowing down the chimney the flame went quietly out. (*c*) Upsetting this lamp by knocking it from the platform was attended with the same satisfactory results as in (*a*). Warming the oil and reservoir to 100° F. made no difference to its satisfactory working. This is probably a safe lamp.

Lamp No. 21.—A lamp similar in construction to Nos. 12 and 16, circular wick, except with small glass reservoir, used in suspension lamps in halls, &c. Flame three and a half inches from reservoir; wick flat, but converted into round wick by action of screw; burner screw fitting badly and requiring one and a half turns to detach it from reservoir. (*a*) On turning lamp half over the size of the flame increased alarmingly, the heat expelling more oil from the reservoir, until sheets of flame shot out of the chimney; otherwise there was little mechanical leakage. Curiously enough, on repeating the experiment and turning the lamp right over, the flame went out, the chimney remaining in position. With a loose chimney the flare was not so serious and could easily be extinguished. (*b*) A draught down the chimney put the flame quietly out. (*c*) Upsetting the lamp was attended with results similar to those in (*a*). On raising the temperature of the oil to 100° F. the results were precisely the same.

Lamp No. 22.—A glass lamp purchased in the eastern suburbs, price 1*d.*, *corresponding exactly with the lamp described in the newspaper paragraph at the commencement of the present article, which caused the death of a child last week under shocking circumstances.* Others identical in pattern could be obtained in any district in or round London. Burner and chimney simply fitted roughly on mouth of glass reservoir, so that if incautiously picked up by the screw or the base of the chimney the reservoir would be detached and fall on the floor. The wick, which was solid and round, fitted fairly well; the flame was one inch and a half from the reservoir—the chimney small and round, provided with a star metal reflector. The metal fittings were of tinned sheet iron. (*a*) As might be expected, on turning the lamp over, the chimney and burner fittings came away with the wicks from the reservoir, and were quickly followed by a stream of oil, which instantly ignited and flared seriously, the oil being scattered all over the place. (*b*) It appeared to be a safe proceeding to blow down the chimney of this lamp. (*c*) Upsetting the lamp produced results identical with those recorded in (*a*). The warming of the oil and reservoir did not appear to accentuate the danger.

It will surely be conceded that in not a single case were the conditions of experiment such as could not occur in practice; indeed, the great probability is that the conditions in practice, especially when accidents occur, would be much more severe. Thus, in falling, the lamps would receive a severe shock; they would probably after being upset roll off the table upon the floor, and most probably come into contact with easily ignited and inflammable materials, such as curtains, table cloths, &c., and the reservoirs, if made of fragile material, would be broken. Hanging lamps would be knocked down and fall probably a considerable distance. And, again, the lamps might be dirty, with pieces of burnt wick in the reservoir and underneath the burner. In all cases it is extremely probable that the chimney would be shattered. Furthermore, it is probable that no one would risk picking up a lamp flaming furiously, and the longer it is left the more dangerous would it become It was expedient, on the other hand, in our experiments to smother the flames and to extinguish the lamps with all



speed. We repeat, then, that the conditions under which these lamps were tested were, if anything, favourable to the lamps. And yet only 2 out of the 22 tested appeared under these circumstances really safe, one of these being a small hand-lamp, sold for 6½*d.* as a safety-lamp, and only recently introduced, we believe, into the market; while the other was a lamp costing at least 15*s.*, which was taken from the library of a private house. Is not the fact that a small safety-lamp is now on sale, as we found, at most oil-shops a striking piece of evidence that those who sell lamps admit the dangers of the majority of others they have hitherto sold and still do sell?

We may classify the results of the experiments we obtained as follows:—

Very dangerous ...	**6**	**(Nos. 1, 5, 8, 13, 19, and 22 in the illustration.)**
Dangerous	**9**	**(Nos. 2, 4, 6, 9, 11, 12, 14, 15, 17.)**
Safety uncertain ...	**5**	**(Nos. 3, 7, 10, 16, 21.)**
Probably safe ...	**2**	**(Nos. 18, 20.)**

Total number tested 22

Proportion rejected as very dangerous, dangerous, or of uncertain character, 90 per cent.

It is therefore no exaggeration to say, according to this result, that, at present at least, 70 per cent. (and probably

more) of the lamps sold in London are extremely liable to add disaster upon disaster to an already very terrible list.

We have obtained no evidence that these lamps were dangerous except when upset. In no case in our experiments did an explosion occur, although attempts were made to produce an explosion by causing sharp puffs of air to go down the chimney when the lamp was alight. Even when the temperature of the oil and the reservoir was at times nearly 100° F. blowing down the chimney simply extinguished the flame. The lamps, therefore, found to be dangerous were so because they freely leaked, so that when the lamp was upset oil escaped and was ignited. Leakage of the lamp is accountable for most of the disasters in London. If the reservoirs were proof against leakage we are convinced that accidents having their origin in paraffin lamps would be reduced to a minimum if not to *nil*. There is little doubt that explosions do occasionally occur, but they must be regarded as exceptional. In the report of the chief officer of the Public Control Department of the London County Council, already alluded to, only three out of the thirty-one accidents were attributed to explosion—one said to be caused by blowing down the chimney, another by a pot falling on the lamp and forcing the burner into the reservoir, and a third by the wick being turned down suddenly so that it fell alight into the reservoir. The second case is certainly an exceptional occurrence, and in the other cases, if the wick had properly fitted the wick-tube, or the wick-tube had projected inside the reservoir within at least a quarter of an inch of the bottom, it would have been impossible for flame to have reached the reservoir. From observations that have been made it is possible, as a cause of explosion, that the wick, being of inferior quality, diminishes in size as it gets soaked in oil, and fits at last so loosely as to drop into the reservoir. It would follow from this that explosions occur mostly with lamps that have been in use some time—a conclusion that is supported by experience. To clear up this point a series of experiments extending over some time would have to be made, but in the meantime the prevention of such an occurrence would be amply met by the introduction of a wick tube extending nearly to the bottom of the reservoir, as set forth below in No. 5 of essential points of construction. We are confident that the majority, and by far the greater majority, of accidents arising from lamps are due to faulty construction of the lamp, whereby the oil escapes alight from the reservoir when it is upset. We do not think that there is any cause for raising the flashing point of oil above its present limit—73° F. in closed vessels, or equal to 100° in open ones. We have, indeed, obtained distinct evidence that there is an advantage in using oil that is to some extent volatile at this temperature. There is reason to believe that metal reservoirs are freer from the liability of accident (apart from fracture), because they get quickly warmed, and the space, therefore, above the oil is full of oil vapour, to the exclusion of air. We note in support of this that the few explosions that have been reported have always occurred in lamps with glass or china reservoirs, which keep cool for a long time, so that vapour is probably mixed with air in the space above the oil. Again, in Germany, where the legal flashing-point of burning oil is actually three degrees below the English limit—viz., 70°—accidents are comparatively rare, a fact which can only be ascribed to the greater intelligence and sobriety of the German working classes, since the lamps they use are similar in construction to those sold here.

We would, therefore, most strongly appeal for legislation, with a view of placing some control over the construction of lamps sold in this country, and we should like to see an official lamp department created at once, the function of which should be to stamp lamps with the Government approval of construction before they are offered for sale.

We are not suggesting a course that is impossible even in regard to the cheapest lamps. These, we are confident, could be made, costing only a few pence, and yet be perfectly safe. The essential points of construction in a paraffin lamp are, according to the observations made in this investigation, as follows:—

1. The reservoir should be of metal or non-fragile material. It should be fixed firmly in the base, and not rest loosely as is the case with many beautiful and artistic lamps in a cup-shaped stand.

2. The lamp should have a base heavy enough to minimise the risk of upsetting.

3. The burner should be connected to the reservoir by a screw with well-cut thread, requiring at least three entire turns before it becomes detached from the reservoir. It should be made tight to the reservoir by means of a washer. Bayonet joints, or pin-and-slot joints, not to say the mere fitting on of the burner like a cap on the mouth of a reservoir, should be prohibited.

4. The wicks should be constructed of material of good quality and should fill the space of the wick tube. The wick should be replaced by a new one as it gets worn and diminishes in size. Circular wick tubes should never be fed by a flat wick the edges of which are not likely to close up in the wick tube. The wick in these cases should be a complete cylinder.

5. The wick tube should be made to descend into the reservoir within at least a quarter of an inch of the bottom. Assuming the screw of the burner to be free from defect, it would be impossible for oil then to escape—the source of most of the danger of paraffin lamps, nearly all of which have their wicks hanging unguarded in the reservoir. This arrangement would also render it impossible for flame to travel into the reservoir space.

In conclusion, it need hardly be pointed out that safety lamps provided with certain structural arrangements of the kind suggested can be obtained. Such are, for instance, the Aria lamp for burning oil of either low or high flashing-point, and the Benson-Lee lamp, with a solid carbon burner, which were described in THE LANCET of June 22nd and July 6th, 1895, respectively. Safety lamps, however, are the exception in the market, and our object in the present inquiry was not to find out the safe lamps, but to ascertain which was the kind of lamp in general use, especially amongst the poor. As the result of our investigations we have found that probably 90 per cent. are not really safe. The sooner our Legislature sets about removing this existent and very real source of danger amongst the community, the better, and then we shall be saddened and terrified no longer by the reports of the shocking fatalities arising from paraffin lamp accidents. So far back as 1862 the Analytical Sanitary Commission of THE LANCET instituted an inquiry into the quality and character of the oil supplied for lighting purposes, some 53 samples being examined. In THE LANCET of March 29th, 1862, it is written that this report revealed the fact in the most convincing and positive manner that much of the oil then sold in the metropolis was in a condition dangerous to the public. This has since been altered by legislation by the simple remedy suggested by the Commission—viz., the fixing of a standard of inflammability. Our report in THE LANCET to-day reveals the fact in (we venture to say) the most convincing and positive manner that most of the lamps now sold in the metropolis (and probably in the provinces) are of a construction dangerous to the public. The remedy in this as in the former case is equally simple and demands instant application.

THE ASHANTI EXPEDITION.

SINCE we last wrote great progress has taken place in all that concerns this expedition. Sir Francis Scott and the head-quarters staff, accompanied by Prince Henry of Battenberg and Prince Christian Victor and the expeditionary force, have left Cape Coast Castle and are now well on their way towards the Ashanti capital. It may be well, therefore, to briefly recapitulate at the present time the object and plan of the campaign and the events that have already taken place. The object of the expedition is the capture of Kumasi, and there are two forces, one proceeding from the south, the other from the north, operating independently of each other to effect this end. While the main force marches from Cape Coast Castle to Prahsu and crosses the Prah in its advance on Kumasi, another, composed of the Gold Coast Constabulary, with a large body of Houssas and Maxim guns, and supplemented by a force of native tribes, is advancing through Koranza territory to attack the Ashantis from the north in the rear.

Assuming that the strength of the opposition to be encountered has not been under-estimated and that the attacking force as a fighting machine proves adequate for the purpose, the success of the expedition may be said to depend upon two things—the transport and medical services. The difficulties to be overcome in these respects are confessedly great.

Everything has to be carried, as we have said, on the heads of natives, and whatever is required by the troops in the way of stores, food, and ammunition must be taken by them. There is no doubt an abundant force of native carriers, but these cannot be relied upon in case of danger or any unexpected attack. Up to the Prah the work is comparatively easy, with rest camps and depôts organised at intervals *en route*, but beyond it the force will have to depend upon the maintenance of its line of communication for its safety and supplies, and for the removal of its sick and wounded from the fighting force in front to the rear and base. The advance force crossing the Prah will, in addition to an emergency ration for each soldier, carry three days' rations and be followed at a convenient distance by a supply column with four days' rations and supplies of ammunition. Defensive posts will have to be established along the line of route in rear of the advancing column, guarded by small garrisons of Houssas. At Prahsu a hospital of sixty beds is established, another of thirty beds at Mansu, and one at the base under Surgeon-Major Wilson, together with the large floating hospital, the *Coromandel*, into which the sick can be drafted as required. The sick and wounded from the front to the base will be carried in hammocks from stage to stage (spare hammocks being kept in reserve at the several stages for the purpose), the bearers returning from the several stages with stores and supplies on the Indian system, which experience, in the Afghan wars and other campaigns in India, has shown to work well. It was very wisely determined that the troops arriving from England should remain on board ship until all arrangements were completed, and they were consequently required to march as soon as disembarked.

During last week considerable progress had been made in regard to all the arrangements for the advance of the force on Kumasi; indeed, it may be said that practically these had been completed. The road to Prahsu had been cleared. The construction of a bridge over the Prah had been finished and subjected to various tests with satisfactory results, and a second bridge thrown over a creek beyond. A large number of carriers had crossed the Prah with stores ready for the troops on their arrival, and a number of scouts had also been exploring the country on the other side of the river. A Houssa force had likewise been encamped about eight or ten miles inland. A store depôt is to be established at Adansi to relieve the inconvenience and pressure of having to make long journeys to obtain supplies. The King of Adansi had visited Prahsu and placed a considerable number of men and carriers at the disposal of the British force. The *Coromandel* arrived last week off Cape Coast Castle and was followed by the hired transport *Manila* with the second battalion of the West Yorkshire Regiment. The *Coromandel* affords excellent accommodation for the sick and is admirably fitted up and in every way well adapted for the purpose of the hospital ship of the expedition. The bearer company of the Army Hospital Corps on board her, having disembarked, started for the front under the command of Surgeon-Major Wolseley. The medical arrangements of the expedition are stated to be of such a kind as to render it the most complete in respect of medical equipment that has ever left this country. Sir Francis Scott and the headquarters staff did not long remain at Cape Coast Castle after their arrival from England, but left for Prahsu, which is a healthier position than Cape Coast.

The march up country is described by those who have made it as very arduous; the heat is oppressive and enervating, and already a fatal case of heat apoplexy has occurred in the person of a sergeant of the Scots Guards on the route from the coast to Mansu. Prahsu and the neighbourhood of the river Prah, as well as all parts of the country where the bush is at all dense, have been found to be unhealthy, and the troops will push on as quickly as practicable, not only in view of getting to the more healthy uplands, but in order to complete their work and make their return march as soon as possible, so as to bring the campaign to a close during the healthy season. So far there is not any large amount of sickness among the troops, and next to none among the officers; still, many cases of fever, heat exhaustion, and sickness have occurred, and it may be confidently assumed that more will follow when the troops have been longer exposed to the heat and malaria and to the fatigue incidental to a campaign in such a climate.

Many of the malarial and other febrile attacks in the West Yorkshire Regiment are attributable to their late service in India and not to the climate of the Gold Coast. There are also several men of the West India Regiment sick in hospital. The supply of a good potable water for the force throughout the line of march will be a difficulty. Sections of the Prah have been set aside for washing and drinking purposes, and, in addition to the use of tea and previously boiled water, filters and alum will be employed as far as practicable for clarifying purposes. Canvas tanks are used for the percolation and storage of drinking-water.

It is a curious fact, and one not altogether free from disquieting misgivings, that there does not seem to be any certainty as to the part which the Mahommedan tribes in the vicinity of Kumasi take in this expedition. Scouts who have penetrated far into the country towards Kumasi have not apparently come across the Ashantis or been able to obtain any positive information as to the nature and amount of the opposition we are likely to encounter. We trust that the military authorities have not under-estimated this. It is possible, on the other hand, that King Prempeh will evacuate and burn Kumasi on the approach of the force. According to late telegrams from the coast, it seems that the so-called envoys from the Ashanti king have no trustworthy evidence of their right to act in that capacity.

(FROM OUR SPECIAL WAR CORRESPONDENT.)

Sierra Leone, Dec. 9th, 1895.

As another opportunity occurs for sending you a few lines whilst *en route* for Cape Coast Castle, the proposed port of disembarkation, I hasten to let your readers know that up to this point and date there have been no cases of sickness or casualties at all; and, to make use of a pithy nautical definition, "All's well on board." Our detention at the Grand Canary group of islands was limited to about sixteen hours, during which stay in port a large quantity of coal (sufficient for the trip round) and some live stock, in addition to fresh fruit and vegetables, were shipped for use on board the vessel. The weather at Las Palmas, although perhaps during mid-day proving a trifle too warm for some of our new unseasoned hands, was simply perfect in other respects. The barometer registered a mean pressure of just over 30°. The sympiesometer indicated 29·52° and the thermometer a maximum of 75° F. at noon, with a minimum of 70° during the early hours of the morning. There was little wind, scarcely sufficient to ruffle the surface of the water, so that our vessel lay perfectly motionless under a cloudless azure-blue sky on a mirror-like sea.

After a most cordial and agreeable reception of Sir Francis Scott and staff by the Spanish officials and local magnates our anchor was once more aboard before daylight on Monday morning, and the ss. *Bathurst* cleared the breakwater between 5 and 6 A.M. and was steaming away in a south-westerly direction long before most of our passengers had risen for their morning bath. The trade winds, or refreshing, cooling North-easters, have on the present voyage so far been conspicuous by their absence. Their influence is generally felt by ships on reaching the Canary Group from the north, or about the latitude of the Canaries, but southerly light airs have been the order of the day and are even now opposing our progress as we steam S. by W. towards the African coast. It is true, on Dec. 3rd, about 4 P.M., they commenced to blow on our port quarter with a force of about four miles an hour, and proved to be exceedingly refreshing whilst they lasted; for the temperature taken on the top of the main companion had risen in twenty-four hours from a mean of 75° to 80° F.; but they unfortunately fell off during the afternoon of the 5th, and the next day about the same time died away altogether. About 3.30 P.M. on the afternoon of the day in question we were well in sight of, and signalled to, Cape Verd lighthouse, making known to those on shore our nationality as well as official number, so that our position might be known.

After speaking, our course was slightly altered a point or two easterly, not being able to change our direction much in consequence of the existence of extensive and dangerous shoals lying due south of the cape previously mentioned. Ultimately altering our course to E.S.E., we have just now cast anchor abreast of Free Town, Sierra Leone, after a most calm and pleasant passage from our last port.

The time betwixt eating, drinking, and sleeping on board ship, too often spent in an idle, aimless way, has on the

present trip been utilised in a way hitherto unobserved—or, at any rate, unrecognised—by the writer during a lengthened experience of sea life, in a very practical and sensible manner—i.e., the officers have used up every spare moment at their disposal in perfecting arrangements and specifying details for active forward movements for at least a portion of the contingent the moment we are permitted to land at Cape Coast Castle. Conspicuous amongst such attempts are the efforts of the medical branch, presided over by Surgeon-Major Wilson, the officers and medical staff corps under his command having daily received lessons on first aid to the wounded, which should prove of infinite service to all concerned when on the battlefield. We hope to be once more under weigh by 5 P.M., and should reach Cape Coast Castle in about five days' time.

Freetown is reported by the shore authorities to be in a very healthy condition at present. The officers are permitted to land; but the men, for obvious reasons, are kept safely on board. The days now are warm, but the nights, especially the time just before dawn, quite cool—so much so that most of our early risers sought this morning the comforts of a great-coat. The cool breeze (N.E.) sets in about 9 A.M. and lasts till 4 P.M. Freetown, although considerably larger than when I visited it some thirty years ago, seems to be sadly deficient in sanitary arrangements, whilst the roads and surface water channels present almost identical conditions to those observed by myself when visiting the town in 1862.

THE PUBLICATION OF PAPERS READ BEFORE THE ROYAL SOCIETY.

DR. PAVY has forwarded us the following reply to Professor Michael Foster, with a request for its publication in our columns:—

35, Grosvenor-street, Jan. 1st, 1896.

DEAR PROFESSOR FOSTER,—I beg to acknowledge the receipt of your letter of Dec. 21st, which you at the same time sent for publication to the medical journals. In the concluding paragraph you ask me not to think you "discourteous in desiring not to continue the correspondence." Your letter is in effect a reply to remarks I have made concerning you in my recently published "Epicriticism," bearing on the "Physiology of the Carbohydrates." As it happens that I cannot allow the matter to remain in the position in which you have sought to leave it, I on my part must ask you not to consider me discourteous in continuing the correspondence with the present letter, a copy of which, in accordance with the example you have set, I send for publication in the medical journals.

The question at issue is the procedure adopted in the case of a certain "paper" published in the Philosophical Transactions. Avowedly, in connexion with what was done, wrong was inflicted, inasmuch as the President and Council of the society recognised the justice of tendering their expression of regret. I pointed out that it was by the unauthorised action of the officers that the "paper" was published, and you say that you have the leave of the President to state that the point I raised is conceded. You afterwards contend that, though the initial step was wrong, the whole of the rest of the action taken in regard to the paper was conformable to the statutes. Your words run: "This point conceded, the whole of the rest of the action taken in regard to Dr. Paton's paper was conformable to the statutes. The President and Council, sitting as Committee of Papers, authorised the officers to 'refer' papers during the recess, and under this authority Dr. Paton's paper was referred to certain Fellows of the society, who, since they were 'knowing and well skilled in the particular branch of science to which the said paper' related, seemed likely to have been chosen referees by the Committee of Papers had it been sitting. The reports being favourable, the paper was, under a like authority, ordered for publication in accordance with the reports. This action of the officers, being reported to the Committee of Papers at its first meeting after the recess, was approved and confirmed. By that decision the President and Council, sitting as Committee of Papers, took from my brother officers and myself all responsibility; had the President and Council thought that the referees had been unwisely chosen it was in their power, and was, indeed, their duty, to undo what had been done and to reconsider the question of publication. They did not do so."

The words I have quoted convey the impression that what was subsequently done is to be looked upon as atoning for the error that was first committed. But the question comes, Was there not as much error in all the subsequent steps of procedure, which you detail as having been taken, as in the first? I am advised that there was; and that nowhere in the statutes is there to be found authority for empowering the "President and Council of the society sitting as Committee of Papers" to delegate the duty of referring papers to the officers. I submit that all that was done by you with respect to the nomination of referees was *ultra vires*, and therefore quite devoid of validity.

You touch in a manner with which I sympathise upon the injury to science that may be inflicted by the operation of a biased mind in the action taken for the Royal Society. The statutes wisely make provision to minimise the chance of the occurrence of an undue exercise of personal influence, and, under their observance, the opportunity is not presented for the weight of responsibility to which you refer being thrown upon the officers.

I must ask you to excuse the plain terms in which I have expressed myself to you. The importance of the matter has led me to speak in the unequivocal language I have used.

Yours faithfully,

To Professor Foster, Secretary, Royal Society. F. W. PAVY.

THE CASE OF MR. LIONEL SMITH.

WE desire to bring this case urgently before our readers. All the facts have been made public in our columns, and a brief recapitulation of them appeared in THE LANCET of Dec. 21st last.

Mr. Lionel Smith has been a deeply and terribly wronged man. Through Mr. Chamberlain's sympathy some measure of reparation is being made to him. He has been offered an appointment in Africa. He has a wife and children, who must accompany him, and he has not the necessary money to take himself and them to the post which he has decided, for their sakes, to accept.

We appeal to his medical brethren to make up that sum for him, and would remind them that to do so quickly would enhance the gift.

Cheques may be made payable to "The Lionel Smit Fund," and sent to us. The following are the subscriptions received up to Wednesday last:—

A Brother Medical Freemason	£3	3	0
A. R.	1	1	0
Mr. B. E. Brodhurst	2	2	0
Mr. W. Burdett-Coutts, M.P.	3	3	0
Dr. H. P. Cholmeley	1	1	
Dr. T. Kilner Clarke	2	2	
Dr. H. Connel	1	0	0
Mr. Davies-Colley	2	2	0
Dr. Clement Dukes	1	1	0
H. M.	5	0	0
Dr. Wm. R. Huggard	2	2	0
K. W. M.	0	10	6
Dr. J. S. S. Logie	1	1	0
Mr. J. G. Macoskie	0	5	0
Dr. A. G. Miller	0	10	0
R. D. B.	0	10	6
Dr. Fredk. W. Saunders	0	10	0
Dr. Schorstein	1	1	0
Dr. S. S. Sprigge	1	1	0
Per Dr. Sprigge—			
Anon	0	10	0
Mr. H. F. Chance	1	1	0
Major Charles Jones, R.A.	5	0	0
Mrs. A. E. Ross	1	1	0
The Proprietors of THE LANCET ...	10	10	0
Dr. Claude Wilson	1	0	0

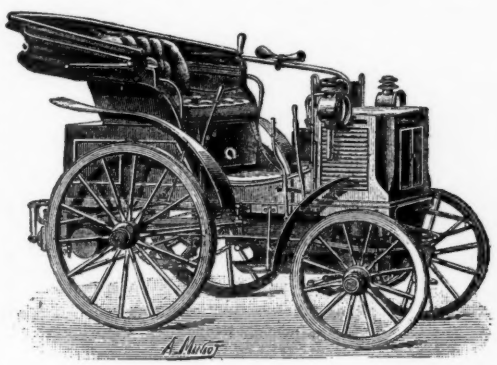
HORSELESS CARRIAGES FOR MEDICAL MEN.

As there is every probability that the efforts of Sir David Salomons, and others who are working with him, will result in the law, which hampers the use of motor carriages, being altered during the coming session, it may interest our readers to have the latest information respecting those types of motor vehicle which are most likely to prove serviceable to them. We have, therefore, obtained from a reliable source a description of the most promising horseless carriages exhibited at the Exposition Internationale de Vélocipédie et de Locomotion Automobile, which was opened in Paris about the middle of December. As the particulars were noted down from a careful inspection of all the vehicles, and written specially from the medical practitioner's point of view, we trust that they will prove of use.

Nearly all the carriages or machines exhibited are driven by petroleum or its allied oils and essences, but in a few cases steam is the motive power. Electricity is practically out of the running, although it is used with some of the petroleum motors to ignite the vapour. Among the leading exhibitors at the show is the firm of Les Fils de Peugeot Frères, who exhibit ten carriages, several of which are no less handsome in appearance than practically useful. The sitting accommodation is precisely the same as in corresponding horse carriages. An elegant *vis-à-vis* upholstered in pig-skin is shown, and another very similar vehicle upholstered in corduroy. A nice-looking victoria is upholstered in dark green, and a useful phaeton is also a noteworthy feature of the stand. Two or three other more or less similar vehicles are exhibited, some seated for two and some for four, and also one that may be described as a covered waggonette. But it goes without saying that all the carriages are four-wheeled. The steering is effected on what is known as the Olympia tricycle principle—that is to say, the two front wheels are pivoted vertically, quite independently of each other, but by means of a connecting-rod are made to turn simultaneously to exactly the same angle. This, with very slight modifications, is the principle adopted by most of the other makers as well. The firm of Les Fils de Peugeot Frères use the well-known Daimler petroleum motor, and place it under the back part of the carriage. That their vehicles are well-made and reliable is attested by the fact that in the 1894 race they took the first prize, and in the Paris-Bordeaux race of last summer the first, third, and fourth prizes. Rubber, but not pneumatic, tyres, are used, and the wheels are constructed on the bicycle principle with direct spokes. A steering pillar rises in front of the driver, and powerful brakes are fitted, besides which there is an arrangement for backing the carriage when occasion requires. The motors range from 2½ to 3¾ horse-power, and the amount of oil consumed by those of the smaller size is about a quart and a half an hour.

Another very prominent firm is that of Messrs. Panhard and Levassor, one of whose carriages came in first in the Paris-Bordeaux race, although, owing to the conditions of the race, it only took second prize. The entire distance of 1200 kilometres was covered in 48 hours 48 minutes, or at a continuous average speed of over fifteen miles an hour. It is to be noted that this firm have recently appointed as their English agents the Daimler Motor Syndicate, Billiter-buildings, London, E.C., to whom intending purchasers in this country should apply. In general outlines many of the Panhard and Levassor carriages are not unlike those of Les Fils de Peugeot Frères, but the wheels are of wood and the tyres in some instances of iron, though more frequently of solid rubber. The Daimler petroleum motor is used, but is generally placed under the front part of the carriage, which Messrs. Panhard and Levassor consider is the best position. A lever is placed in front of the driver to steer by, another lever at the side to regulate the speed with, a third to back with, and a fourth to apply the brake to the tyres of the rear wheels. In addition, however, to this hand brake there are two pedals worked by the feet—not bicycle pedals, but more like those of a piano. The left-hand pedal disconnects the motor, so that it ceases to propel the carriage, though continuing to work, and the right-hand pedal applies a brake to a part of the gearing mechanism. It is easy, therefore, to stop the carriage immediately. The vehicle which came in first in the Paris-Bordeaux race is seated for two and looks somewhat heavy for so small a number of passengers. Another carriage on similar lines, but covered except at the sides, is also shown. There is a very nice hooded victoria, which would, no doubt, be useful to many medical men, but it is fitted with iron tyres. Among the other carriages on the stand are a covered waggonette and a phaeton, but perhaps the most interesting of all is a miniature carriage, running on four small, lightly-made, wooden wheels, fitted with pneumatic tyres. It is built very low and is comfortably seated for two, and when a covered carriage is not needed it could scarcely be surpassed for the purpose of anyone requiring a handy little vehicle. This carriage will run at a maximum speed of twenty to twenty-two kilometres an hour, and will go for eight hours without recharging. It has no arrangement for backing, but the weight is so comparatively small that it can easily be pushed back by hand. The cost of the benzoline for running this carriage is estimated at two to three centimes a kilometre, while that for the ordinary carriages of Messrs. Panhard and Levassor is about five centimes.

There are at the show three or four other miniature carriages, which, perhaps, the practitioner would find equally useful, though they are not all on exactly the same lines. One of these is made by the Gladiator Company, and, though only recently introduced, is taking so well that the makers state they received no less than ninety-six orders for this particular type during the first four days of the show. It could not, without stretching the usual acceptation of the word, be described as a "cycle," but it is constructed more on



Carriage which arrived first in the Paris-Bordeaux race.

cycle lines than are the larger and heavier vehicles. Running on four small pneumatic-tyred, tangent-spoked wheels, and driven by a petroleum motor of four horse-power, it will travel at the rate of thirteen miles an hour for fifteen hours without recharging, or is capable of attaining a maximum speed of twenty-five miles an hour. The estimated cost of running it is 8 centimes a kilometre, or between 1¼*d.* and 1½*d.* a mile. It can either be arranged to carry four, with the two seats *vis-à-vis*, or the front seat can be removed and luggage carried in its place. The weight is about 405 lb. A charming miniature carriage is also shown by M. A. Loyal, and the working parts of this machine appear to be simpler than is usually the case. The petroleum motor drives directly on to the rear axle by means of oscillating cylinders, instead of through the medium of chains or cog-wheels. Pneumatic tyres are fitted. The speed is variable, ranging from twelve to thirty kilometres an hour. Other carriages on lines not unlike those already mentioned are exhibited by M. E. Delahaye, Messrs. Landry and Beyroux, M. E. Rossel, M. E. Roger, M. H Vallée, La Compagnie de Voitures sans Chevaux, M. H. Tenting, M. P. Gautier, and Messrs. Vincke and Delmer of Brussels. Covered carriages are not much in evidence, but many of the vehicles have hoods.

It is scarcely necessary to speak of the motor bicycles, which are hardly adapted for a medical man's use. But the motor tricycles might in some cases be serviceable. Messrs. De Dion and Bouton exhibit what appears to be a thoroughly practical petroleum tricycle, with the motor behind, the electric battery for igniting the vapour being hung from the top tube, and the triangular oil reservoir

attached to the back of the diagonal tube. Pedals are fitted, by means of which the rider can start the machine or assist it up-hill, but on level roads the pedals are disengaged from the driving gear and serve merely as footrests. This machine, which is built on the lines of the up-to-date modern tricycle, weighs about 130 lb. and will attain a speed on good roads of fifteen to twenty miles an hour. It will go for ten hours without recharging, and without the assistance of the rider will ascend inclines of 6 in 100. The Gladiator petroleum tricycle is built on rather different lines, having two steering wheels in front and but one driving wheel behind. It weighs about 1 cwt. and will travel up to nineteen or twenty miles an hour, costing approximately 6 centimes a kilometre. Of the very few steam-propelled carriages and cycles at the show the only one worth mentioning from our point of view is that made by M. Dalifol, and even that, if it comes up to the maker's claims, would perhaps rather be suitable for the "scorching" cyclist than for the steady-going practitioner, as the speed attainable is stated to be from thirty to forty kilometres an hour. This machine is a small quadricycle with a comfortable seat for two, and certainly has a wonderfully neat and simple appearance for a steam-propelled carriage. Petroleum is used as the fuel for generating the steam.

In nearly all the motor carriages, as distinct from the motor cycles, the bulk of the driving mechanism is placed underneath the body of the carriage and is hardly visible The power of the motor is usually transmitted to the rear axle by means of two chains, one on each side of the carriage, and as high-speed motors are commonly used the speed is generally geared down a good deal. When petroleum motors are employed a handle is provided by which to start the carriage until the motor gets into action, but when the arrangement is such that the driving mechanism can be thrown out of gear without stopping the motor there is no necessity to start the carriage by hand every time it is pulled up. This is rather an important point for the medical practitioner who has a number of visits to make. In proper hands a well-designed motor carriage is more under control than a horse carriage. As to prices, it may fairly be anticipated that a reduction will take place when the machines come into more general use, but at present the following is an approximation to the figures asked: For a handsome victoria, phaeton, or other full-sized carriage, £200 to £250; for a miniature carriage, £130 to £200; and for a tricycle, £50 to £80.

With regard to the drawbacks to motor carriages, we have detected very little odour from the petroleum, but we are inclined to think that the complication of the driving mechanism and the amount of technical knowledge required by the driver are under-estimated by some. It may be simple enough to work the carriage as long as all goes right, but an allowance must be made for things sometimes going wrong. As an example of the untoward occurrences that may happen, the driving gear may get clogged with mud; when, therefore, as is often the case, a good deal of the mechanism is exposed, we should recommend the intending purchaser to make particular inquiries on this point. It also has to be considered whether a supply of benzoline, or whatever oil is used, can easily be obtained. Considerable vibration is felt in some of the carriages, especially when the carriage is at rest, but the motor is working. But in spite of these and other possible drawbacks we believe that the motor carriage in some of its forms will prove to be admirably suited for the requirements of medical men and will not be long in coming into extensive use.

LITERARY INTELLIGENCE.—The following works are announced by Messrs. J. & A. Churchill to appear during the present month:—"A Handbook on Leprosy," by S. P. Impey, M.D., M.C., late Chief and Medical Superintendent, Robben Island Leper and Lunatic Asylums, Cape Colony, South Africa, with coloured map and thirty-eight photographs; "A History of the Cholera Controversy," by Sir George Johnson, M.D., F.R.S.; a new work on "The Theory and Practice of Hygiene," by Professor Lane Notter, M.D., and R. H. Firth, F.R.C.S., of the Army Medical School, Netley; a third edition of Jacobson's "Operations in Surgery"; and a fourth edition of Clouston's "Mental Diseases."

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Fever in the Borough of Bury, by Dr. MONCKTON COPEMAN.[1]—The fatality from "fever" indicated in the mortality returns of the Registrar-General towards the close of 1894 led to this inquiry, and it transpired that attacks and deaths from so-called continued fever were as a matter of fact due to typhus fever, a disease which happily is becoming rare in the extreme in England and Wales. Dr. Copeman discusses the disease largely in its clinical aspects, and he issues in the form of a genealogical tree the outcome of his investigations as to the origin of the disease and its subsequent diffusion in Bury. This shows that the disease had been many months in spreading, and that it would probably have been early detected had there been any one person at the isolation hospital who was responsible for preparing any clinical record of the cases, which, as often is very properly the case, were actually attended by their own medical advisers. The first patient infected two others; these two led to five other attacks, and so the matter went on until between twenty and thirty cases had occurred. Bury, unfortunately, has sanitary areas which lend themselves to the diffusion of an infection like that of typhus fever, and though during the last few years a number of insanitary dwellings have been either closed or pulled down under the Housing of the Working Classes Act, yet much evidently remains to be done as soon as a sufficiency of new dwellings has been provided to prevent overcrowding in those that remain. Risk of such overcrowding is great in a town where middle-class houses are apt to be let off room by room in separate tenements. Dr. Copeman discusses in this report all the general sanitary circumstances of the district, but the main interest of it lies in the detection of typhus fever as a cause of unexpected disease and death, and in the confirmation afforded of this view both by the clinical aspect of the cases and by the circumstances under which it spread from person to person.

Diphtheria in and about Bideford, Barnstaple, and Ilfracombe, by Dr. R. J. REECE.—This report deals in very great detail with the whole of the sanitary circumstances with which a somewhat maintained prevalence of diphtheria was associated. Barnstaple rural district suffered most. Thus, in 1893 there were 67 cases and 13 deaths, and in the early part of 1894 23 cases and 8 deaths from that disease in the district. The history of nearly every attack heard of in that district is carefully discussed by Dr. Reece in relation to topography, soil, milk-supply, school influence and other sources of personal infection, and the relation of the disease to maladies such as were assumed to be "mumps," &c., but the difficulty of getting information sufficiently trustworthy for etiological purposes seems to have been very great. One thing, however, is certain, the schools were largely instrumental in spreading the disease; and there had prevailed antecedently to the recognised diphtheria a number of maladies, such as sore-throat, quinsy, mumps, &c. It is just in a maze of this sort that the beginnings of diphtheria are so often lost. The descriptions which are given in the report of the prevailing sanitary circumstances should be very helpful to the local authorities in dealing with conditions which need amendment quite apart from the question of proving that these were actually the cause or not of given occurrences of disease.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

St. George's, Hanover-square.—In his twenty-third annual report on the health of St. George's, Hanover-square, Professor Corfield makes the following remarks in regard to enteric fever in his district during 1894: "Of the 65 cases of enteric fever no fewer than 29 were certified in November and December, and only 14 in the *three* previous months, when the seasonal prevalence of that disease usually takes

[1] Eyre and Spottiswoode, East Harding-street, E.C.; John Menzies and Co., Edinburgh and Glasgow; Hodges, Figgis, and Co., Dublin. Price 1s.

place, and on investigation I find that this is usually the case, as is shown by the following table:—

Cases of Enteric Fever.

Year.	August, September, and October.		November and December.	
	No. of cases.	Average per month.	No. of cases.	Average per month.
1891	6	2·0	12	6·0
1892	15	5·0	15	7·5
1893	16	5·3	18	9·0
1894	14	4·6	29	14·5

"This follows upon the delivery of insufficiently filtered Thames water when the river is in flood, which was especially noticeable last year, the samples taken in November being very bad indeed." These figures are interesting and are worth continuing year by year and of being carried back to former years. The figures are of course small, and in order to establish a case against the Thames water from this standpoint it will be necessary to compare them week by week with the condition of the river as regards flood and to make due allowance for the distribution of the filtrate and the incubation periods of the cases. There are, in fact, many complicated factors involved, but the figures are well worthy of being placed on record. It would seem from Professor Corfield's figures that the Thames, during at least the last four years, has been in flood at apparently the same season of the year, but more especially so during 1894. Assuming defective filtration to be responsible for the increase of the enteric fever observed, it is possible that those parts of metropolitan sanitary districts supplied by different water companies would show some variations in regard to their enteric fever incidence after floods in the Thames valleys, as it is hardly probable that exactly the same methods of storage, filtration and distribution are adopted by the several water companies. Comparisons such as these would, however, be best brought out by dealing with the London statistics as a whole and by contrasting them with those of other communities deriving their drinking-water from rivers liable to sewage pollution. We have indeed reason for believing that a very careful inquiry in the sense indicated was during the summer of the present year undertaken by the medical officer of health to the London County Council, and it would be extremely interesting to learn how his results compare with the observations contained in Professor Corfield's report.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 3977 births and 3881 deaths were registered during the week ending Dec. 28th. The annual rate of mortality in these towns, which had been 17·8 and 18·6 per 1000 in the two preceding weeks, further rose last week to 19·1. In London the rate was 17·8 per 1000, while it averaged 20·0 in the thirty-two provincial towns. The lowest rates in these towns were 10·5 in Huddersfield, 12·1 in Cardiff, 12·2 in Brighton, 12·3 in Croydon, and 13·6 in Gateshead; the highest rates were 22·7 in Birmingham, 25·4 in Manchester, 25·5 in Wolverhampton, 26·1 in Liverpool, and 27·3 in Salford. The 3881 deaths included 544 which were referred to the principal zymotic diseases, against 524 and 593 in the two preceding weeks; of these, 207 resulted from measles, 107 from diphtheria, 90 from whooping-cough, 51 from "fever" (principally enteric), 48 from scarlet fever, 39 from diarrhœa, and 2 from small-pox. No fatal case of any of these diseases was recorded either in Croydon or in Huddersfield; in the other towns they caused the lowest death-rates in Birkenhead, Gateshead, Portsmouth, Nottingham, and Sheffield, and the highest rates in Blackburn, Liverpool, Burnley, and Salford. The greatest mortality from measles occurred in Leicester, Oldham, Liverpool, Burnley, Blackburn, and Salford; from scarlet fever in Burnley and Bolton; from whooping-cough in Liverpool, Manchester, and Bradford; and from "fever" in Derby. The 107 deaths from diphtheria included 71 in London, 8 in Manchester, 7 in Birmingham, and 3 each in Liverpool, Burnley, and Newcastle-upon-Tyne. One fatal case of small-pox was registered in London and 1 in Birmingham, but not one in any other of the thirty-three large towns. There were 77 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, Dec. 28th, against 87, 89, and 82, at the end of the three preceding weeks; 12 new cases were admitted during the week, against 18 and 5 in the two preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2798, against 2805, 2800, and 2725 on the three preceding Saturdays; 184 new cases were admitted during the week, against 312, 329, and 210 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 264 and 291 in the two preceding weeks, further rose to 318 last week, but were 315 below the corrected average. The causes of 79, or 2·0 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Bristol, Nottingham, Bradford, Newcastle-upon-Tyne, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Burnley, Preston Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·9 and 19·2 per 1000 in the two preceding weeks, further rose to 20·0 during the week ending Dec. 28th, and exceeded by 0·9 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 13·7 in Perth and 15·7 in Leith to 21·0 in Glasgow and 32·7 in Greenock. The 578 deaths in these towns included 35 which were referred to whooping-cough, 14 to diarrhœa, 9 to scarlet fever, 7 to measles, 7 to "fever," 5 to diphtheria, and not one to small-pox. In all, 77 deaths resulted from these principal zymotic diseases, against 68 and 83 in the two preceding weeks. These 77 deaths were equal to an annual rate of 2·7 per 1000, which corresponded with the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 24 and 23 in the two preceding weeks, rose again to 35 last week, of which 20 occurred in Glasgow, 7 in Aberdeen, 3 in Edinburgh, and 3 in Dundee. The deaths from scarlet fever, which had been 8 and 13 in the two preceding weeks, declined again to 9 last week, and included 3 in Aberdeen. The 7 deaths referred to different forms of "fever" were within one of the number in the preceding week, and included 3 in Glasgow and 3 in Edinburgh. The fatal cases of measles, which had risen from 1 to 17 in the four preceding weeks, declined to 7 last week, of which 3 occurred in Glasgow and 2 in Greenock. The deaths from diphtheria, which had been 5 and 11 in the two preceding weeks, declined again to 5 last week, and included 2 in Glasgow and 2 in Edinburgh. The deaths referred to diseases of the respiratory organs in these towns, which had been 97 and 103 in the two preceding weeks, further rose to 142 last week, and slightly exceeded the number in the corresponding week of last year. The causes of 39, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased in the three preceding weeks from 20·1 to 25·1 per 1000, declined again to 23·3 during the week ending Dec. 28th. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 24·0 per 1000, the rate during the same period being 18·0 in London and 17·2 in Edinburgh. The 156 deaths registered in Dublin during the week under notice showed a decline of 12 from the number in the preceding week, and included 3 which were referred to the principal zymotic diseases, against 8 in each of the two preceding weeks; of these, 1 resulted from small-pox, 1 from diphtheria, and 1 from "fever," but not one either from measles, scarlet fever, whooping-cough, or diarrhœa. These 3 deaths were equal to an annual rate of 0·4 per 1000, the zymotic death-rate during the same period being 3·0 in London and 2·3 in Edinburgh. The mortality from diphtheria corresponded with that recorded in the preceding week, while that from "fever" showed a decline. The death from small-pox last week raised the total number of fatal cases during the quarter to 8, against 78, 23, and 12 in the first three quarters of 1895. The 156 deaths in

Dublin last week included 10 of infants under one year of age, and 51 of persons aged upwards of sixty years; the deaths of infants showed a marked decline, while those of elderly persons showed a further increase upon recent weekly numbers. Nine inquest cases and 7 deaths from violence were registered; and 52, or one third, of the deaths occurred in public institutions. The causes of 10, or more than 6 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF MEDICAL STAFF.

SURGEON-LIEUTENANT-COLONEL QUILL has been appointed to the Medical Charge of the Station Hospital at Chatham. The following officers have embarked for Barbadoes:—Surgeon-Majors McLaughlin and Risk and Surgeon-Captains Dobson and Will. The following officers, in addition to those already notified, have embarked for a tour of service in India:—Surgeon-Lieutenant-Colonel Smith and Surgeon-Major Feltham. Surgeon-Majors Macneece and Baker and Surgeon-Captain Corkery have arrived at Bermuda. Surgeon-Captain Bullen has been posted to Cork, and Surgeon-Captain Green to Newry. Surgeon-Captain Reid has been transferred from Netley to Colchester.

ARMY MEDICAL STAFF.

Surgeon-Colonel Thomas Maunsell to be Surgeon-Major-General, vice J. Inkson, M.D., retired. Brigade-Surgeon-Lieutenant-Colonel Thomas O'Farrell, M.D., to be Surgeon-Colonel, vice T. Maunsell. Surgeon-Major Arthur M. Kavanagh is placed on temporary half-pay on account of ill-health.

INDIA AND THE INDIAN MEDICAL SERVICES.

Surgeon-Captain B. H. Deare is appointed to act as Deputy Sanitary Commissioner, Metropolitan and Eastern Bengal Circles until further orders. Surgeon-Captain F. P. Maynard, at present employed in the Gaol Department, is appointed to do supernumerary duty at the Presidency and is attached to the Presidency General Hospital. Brigade-Surgeon-Lieutenant-Colonel F. C. Nicholson, Civil Surgeon, of Patna, on leave, is appointed, on the expiry of his leave, to act as Civil Surgeon of Champaran. Surgeon-Major H. G. L. Wortabet, Madras Establishment, Medical Officer, 3rd Infantry, is appointed to be Medical Officer, vice Brigade-Surgeon-Lieutenant-Colonel J. F. Sargent, deceased. Surgeon-Majors C. G. W. Lowdell and A. V. Anderson have respectively delivered over and received charge of the office of the Deputy Sanitary Commissioner, Western Registration District. Surgeon-Major J. W. T. Anderson and Surgeon-Captain W. Carr Sprague have respectively delivered over and received charge of the Aden Prison Gaol. Surgeon-Captain N. P. Sinha, Deputy Sanitary Commissioner, Western Bengal Circle, on leave, is appointed to be Civil Surgeon of Noakhali.

NAVAL MEDICAL SERVICE.

The following appointments are notified:—Staff-Surgeon G. F. Wales to the *Pallas*, and Surgeon G. F. Dean to the *Wildfire* (additional) for *Sans Pareil*.

ARMY MEDICAL RESERVE OF OFFICERS.

The undermentioned officers to be Surgeon-Lieutenants:—Surgeon-Lieutenant Sydney Monckton Copeman, M.D., 2nd London Rifle Volunteers, and Surgeon-Lieutenant John Herbert Stacy, 1st Volunteer Battalion the Norfolk Regiment.

VOLUNTEER CORPS.

Artillery: 1st Gloucestershire: Walter James Hill, gent., to be Surgeon-Lieutenant. 1st Newcastle-on-Tyne (Western Division Royal Artillery): Quartermaster J. D. Farquharson, M.B., is appointed Surgeon-Lieutenant. *Rifle:* 2nd Volunteer Battalion the King's Liverpool Regiment: Surgeon-Captain G. Westby to be Surgeon-Major. 1st Volunteer Battalion, the Essex Regiment: Surgeon-Lieutenant A. R. H. Oakley to be Surgeon-Captain. 24th Middlesex: Charles Ranald Handfield-Jones, gent., to be Surgeon-Lieutenant.

TREATMENT "BY ORDER" IN THE FRENCH ARMY.

The principal medical officer of the Fourteenth Army Corps has issued a circular in which he reminds all medical officers serving under him that if they neglect cold baths in the treatment of typhoid fever they are taking on themselves a grave responsibility. It would seem that this kind of treatment "by order" is rather common in the French medical department. In another army corps there is said to be an official prescription for use in every form of dysentery; and in a third, if the junior medical officers wish for advancement, they are bound to treat fevers with digitalis. Complaints continue to reach us from many sources regarding the discontent which undoubtedly prevails throughout the military medical service in France, but the grievances alluded to have, for the most part, an extraneous origin. If, however, the above-mentioned facts are exact, internal reform is evidently quite as much needed as liberation from external trammels. In this connexion we note with satisfaction that a deputy named Bazille proposes the nomination by the Chamber of a Commission composed of thirty-three members, in order that an exhaustive inquiry into the organisation of the various bureaux at the War Office may be instituted, with especial reference to that of the sanitary services.

THE SURPLUS AND THE SERVICES.

The Chancellor of the Exchequer will be beset, we may be sure, with all sort of claims upon him in regard to the disposal of the surplus that will remain in his hands at the end of the financial year. At a time when wars and rumours of wars are in the air and the new year opens with all kinds of difficulties and unexpected developments in connexion with the United States, Turkey and Armenia, the Transvaal crisis, and the Ashanti Expedition, the strengthening of our naval and military forces will, no doubt, have the first claim upon his consideration. It is an old and trite saying, of which recent events have shown the truth, that the unexpected is that which happens, and statesmen must in these days be prepared for almost any eventuality. The navy will probably be increased and developed, and the army will also claim its share of the surplus. We hope that when their claims come to be considered the sanitary state of both, the maintenance of the health of our seamen and soldiers, and the efficiency of the medical services will not be lost sight of by the Chancellor of the Exchequer.

THE WEIGHT TO BE CARRIED BY SOLDIERS.

The *Army and Navy Gazette*, alluding to the weights carried by infantry soldiers in the French and German armies and by those of the British army, has started a useful inquiry as to what is the essential minimum weight which a soldier should carry consistently with his own health and comfort, assuming that the main amount of the kit, &c., be conveyed by train and transport waggons. Our service contemporary elicits information on the subject and puts its questions categorically. As the matter is one affecting the health and personal hygiene of an army so largely composed of very young soldiers it may be interesting to reproduce these questions. 1. Is it necessary at the present day to put such great weight upon the soldier's back as in the days when roads were bad and rails did not exist? 2. Is not a heavily-weighted soldier at a disadvantage compared to one without pack or valise? 3. What articles must be carried by a soldier, and of what aggregate weight? 4. What other articles should be provided for a soldier in the field, and how should they be carried?

THE MILITARY HOSPITALS AT PORTSMOUTH.

The Admiralty has been for some time arranging to include an extended area within the limits of the dockyard, and have now commenced negotiations with the War Office for the acquisition of the military station hospital at Portsea. The present area of the establishment is 293 acres, but it is proposed to add sixty-two acres of (chiefly) War Department land. On the new area are the warders' quarters, which have been closed since the convict prison was evacuated; the volunteer drill-hall, which is to be built on another site; and Anglesea Barracks. Plans have been prepared for the building of new barracks at Gosport when the Anglesea quarters have been turned over to the Admiralty. The inclusion of the station hospital in the plan is, however, only of recent date. It is proposed to use it as part of the new naval barracks, and it will be replaced by a military hospital for the troops at Hilsea.

DEATHS IN THE SERVICES.

Fleet-Surgeon St. Lawrence Ffrench-Mullen, R.N. (retired), M.D. R.U.I., on Dec. 28th, 1895, at his residence in Dublin. He was educated at the Christian Brothers' Schools and at St. Jarlath's College, Tuam, the town in which he was born, receiving his medical education at Queen's College,

Galway. After graduating in 1868 he entered the Royal Naval Service, serving in the *Hercules*, the *Chameleon*, the *Excellent*, and the *Rupert*. He was afterwards appointed to the Royal Naval Hospital at Malta. He also served in North America and in the West Indian station, and retired in 1888, after attaining the rank of Fleet-surgeon. Of late years he took an active part in political matters.

NEW YEAR HONOURS IN THE SERVICES.

Among the recipients of New Year honours in the Services are Sir Joseph Fayrer, K.C.S.I., LL.D., M.D., F.R.S. (to whom we have alluded in another column), and Surgeon-Lieutenant-Colonel Samuel Haslett Browne, M.D. The former gentleman has been made a baronet, and the latter a Companion of the Most Eminent Order of the Indian Empire.

Correspondence.

"Audi alteram partem."

MONUMENT TO PASTEUR.

To the Editors of THE LANCET.

SIRS,—The town of Dôle (Jura), the birthplace of Louis Pasteur, has decided to erect a monument to that great man. A committee, at the head of which is M. Felix Faure, President of the Republic, and many of the present Cabinet, Senators, and Deputies, has been formed, and a list of subscriptions opened throughout the civilised world. The French Chamber of Commerce in London has been requested to take the necessary steps to bring this subscription to the notice of the British public; and we shall be thankful if you will kindly help us in the matter. The work of Pasteur has been fully recognised in England, where his admirers are very numerous and many will cherish his memory to the end of their days. We feel certain that in this universal manifestation of gratefulness towards a benefactor of mankind Englishmen will respond liberally. Our President, M. Marius Duché, Monument-house, E.C., in conjunction with the whole of our committee, will be pleased to receive all donations, which will be acknowledged in the press, and should any representative men desire to join our committee we shall be pleased to accept their aid.—I am, Sirs, yours respectfully,

Chambre de Commerce Française de Londres, Monument House, E.C., Jan. 2nd, 1896. LÉON CLERC.

PRESIDENT CLEVELAND'S MESSAGE FROM A PSYCHOLOGICAL POINT OF VIEW.

To the Editors of THE LANCET.

SIRS,—The action of President Cleveland in sending to Congress a Message so menacing to England is so extraordinary that everyone is asking "Why did he do it?" Various motives, political and personal, have been attributed to him, and his action has been termed a blunder or a crime; but it seems to me that his conduct is almost inexplicable, except on the supposition that he is a clear-headed, high-minded man, determined at any cost to himself to prevent a war between the United States and England—a war which would be so disastrous in its results and at the same time so trivial in its origin that it might well be termed the greatest crime of the century. The existence of a strong feeling against England in the United States is evidenced by the warm—one might almost say enthusiastic—reception of the President's Message, and such a feeling might readily be fanned by Jingo politicians and newspapers for party purposes during the coming elections until it reached fever heat and embroiled both countries in a war. More especially might this occur as the currency question is one of the great difficulties of American politics. America has almost unlimited supplies of silver, but lacks gold, whereas Great Britain's colonies produce gold largely, and some of the territories in Venezuela now in dispute are auriferous. It has been said in America that a war between that country and England would mean destruction to the British Empire, and by some the hope may have been entertained, if not expressed, that in the dismemberment of this great Empire the United States might acquire auriferous territories and thus solve the currency problem. Others may have thought that the same end might be gained by the submission of England to the award of arbitrators giving to Venezuela gold-bearing districts over which the United States might establish a protectorate. To avoid such a calamitous war, as one between England and America will certainly prove, it may be supposed by many Americans that England will submit to any dictation, and such an idea is not unlikely to be fostered by some sections of the American Press. But President Cleveland, by putting into his Message the only possible answer that England could make to such a proposition, has taken care that the true state of the case shall be apparent to every American citizen, for it is almost impossible to misread the concluding words of his message: "There is no calamity which a great nation can invite which equals that which follows supine submission to wrong and injustice and a consequent loss of material self-respect and honour beneath which is shielded and defended the people's safety and greatness."

And what better time could have been chosen for a message—apparently warlike, but really pacific—than just long enough before Christmas to allow it to be discussed in both countries under the influence of the religious feeling of both countries—strong at all times, but especially powerful at the season of which the watchword is "Peace on earth, good will toward men." Let us hope that both countries will take the timely warning which the President's Message has given them, and avoid the war into which they might have drifted.—I am, Sirs, yours faithfully,

T. LAUDER BRUNTON.

Stratford-place, Cavendish-square, W., Jan. 1st, 1896.

"THE UTILITY OF FIRST AID."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Dec. 7th, 1895, an interesting annotation on the above subject cannot fail to attract the attention of the members of the profession who devote some of their spare time to the teaching of "first aid to the injured" and of ambulance work in general. For a long time it has been a pleasure to me to participate in such tutorial work, and in connexion with "railway ambulance" I may venture to say that on the South-Eastern Railway, with the kind and courteous coöperation and approval of Sir Myles Fenton, I have instructed three railway classes, one in Tunbridge Wells, one at Tonbridge Junction, and a third at Dunton-green Junction, in every case with good results, especially at Tonbridge, where the total number of candidates who presented themselves for examination were one and all successful. In April, 1894, I drew up a scheme of "railway ambulance" with a view to the formation of a "South-Eastern Railway Ambulance Department," the headquarters of which would be at London Bridge Station, under the supervision of an "inspecting officer of ambulance," who would be a surgeon of some experience of military or civil organisation and of transport duties. Ambulance store depôts were to be established along the line at junction stations in the charge of a man specially qualified to take up the duty; at smaller stations an ambulance store-box would be kept in a conspicuous position by the station-master, and every train would carry in the guard's van a small case containing splints, bandages, lint, Esmarch's elastic tube tourniquet, &c. At large stations local medical gentlemen would act as "instructors" of railway ambulance classes. The duties of the "inspecting medical officer" would entail periodic inspections of all railway men qualified to render "first aid," and to report on their fitness or otherwise to the general manager and directors of the companies, to inspect all ambulance stores and *matériel*, and to give courses of lectures and instruction at the London stations of the company. In order to stimulate public interest and support in railway ambulance work, "ambulance competitions" should be held at important stations, and the public given an opportunity of estimating the practical utility of such work. The above suggestions were submitted to the general manager of the South-Eastern Railway Company, and I was greatly encouraged by the courteous consideration they received. Having carefully studied the railway accident reports of the Board of Trade, I feel convinced that if railway officers and men are better instructed in "first aid," and if the travelling public are more careful in entering and alighting from trains—the commonest cause of platform injuries—the fatality of ordinary railway accidents and injuries, apart

from causes beyond the control of railway officials and passengers, will be very considerably diminished. I hope ere long to be able to forward you a "notebook" dealing with railway "first-aid" work, which, I think, will be of some practical use to railway servants and others interested in the subject. With apologies for trespassing on your time and space,—I am, Sirs, yours obediently,

N. HAY FORBES, F.R.C.S. Edin. (Exam.),
Examiner, St. John Ambulance Association; formerly Surgeon, H.M. Army Medical Staff.

Tunbridge Wells, Dec. 9th, 1895.

ANÆMIA OR ANEMIA?

To the Editors of THE LANCET.

SIRS,—Spelling is, at the present time, a prominent subject. It has a special interest for us now that so many medical books, printed in the United States, present to us spelling which we are not yet sufficiently familiar with to appreciate. The readers of THE LANCET may be interested in the following letter from Professor Skeat, which he has been so good as to give me permission to send to you. The spelling of the word "anemia" carries with it that of many others. I am, Sirs, yours faithfully,

W. R. GOWERS.

"DEAR SIR,—It is quite impossible to regulate spelling. The one great principle in all cases of doubt and dispute is that every man shall make his own laws, and it is not likely that argument will be listened to or even permitted. In the New English Dictionary the spelling given is *anæmia;* all the same, the spelling *anemia* occurs in one of the examples. It is largely a question of date. The Latin *æ* became *e* in French; and when words come into English through French the spelling *e* may easily prevail. For example, we have the word *primeval* on a French model. I am trying to introduce the spelling *medieval*, to pair off with this; and I think it is making some headway. We have, in Cambridge, a 'Medieval and Modern Languages Tripos.' The practical objection to *æ* and *œ* is that they are difficult to write and print. In many cases an *e* would serve the purpose. I need not say that the Authorised Version of the English Bible (by many considered as a good authority) has the form *emerods* instead of *hæmorrhoids;* yet no one objects. Ogilvie's Dictionary prefers *hemorrhoids* to *hæmorrhoids*, and, I think, with reason. There is no *æ* or *œ* in English; it is always pronounced as *e*, and might just as well be so written. The use of writing is to represent the sound of the words, not to be everlastingly harping upon the Greek and Latin forms. But few people can see this; and when a thing is wrong they stick to it all the same. Thus *aneurism* is common, and I like it and admit it. But it is false etymology; of course, it should be *aneurysm*. And the question for those who defend *hæmorrhage* is, Will you, then, undertake to use the form *aneurysm?* If not, why not? I pause for a reply. No one now writes *cœlestial*, yet it is from the Latin *caelum*. Again I ask, why not?—Yours sincerely,

"Cambridge, Dec. 15th, 1895. "(Sd.) W. W. SKEAT."

"MASON *v.* HADDEN."

To the Editors of THE LANCET.

SIRS,—The particulars of this action at law, in which a medical man was sued for damages in consequence of his having notified a case under the Infectious Diseases Notification Act which he had reasonable grounds for regarding as one of small-pox, will be within your recollection; also that a jury awarded damages to the plaintiff, but that on appeal the verdict was reversed by the full Court. We were previously advised that any public discussion of the matter by the medical profession would be undesirable, fearing that doing so might in any way prejudice the case. The judgment of the full Court justifies Dr. Hadden and relieves him from any imputation whatever. In addition to the anxiety and trouble necessarily caused to him while the action was pending, the question of expense has to be considered. Dr. Hadden has already incurred a large pecuniary liability, and as he fought this case on professional and public as well as on private grounds, we feel that he should not be allowed to suffer any loss; therefore we readily ask our professional brethren to join in a subscription to meet any such expense. The issues raised have had an interest far beyond an individual one, and have induced Dr. Hadden to contest the case on broad public grounds, for had the contention of the plaintiff in this matter remained unchallenged a blow would have been struck at public safety as well as at the independence of medical men.

If a physician is to be proceeded against for the discharge of a duty cast upon him by an Act of Parliament passed for the protection of the public at large, it would seriously interfere with the profession in carrying out the law and in protecting the public as they are bound to do. We feel that both the moral and substantial support of his profession should be accorded to Dr. Hadden in the trying position in which he has been placed. The Act referred to is already unpopular enough with many persons, and if a new terror in the shape of actions for damages against medical men for carrying out the duty cast on them, and for which they are made legally liable, be introduced it is to be feared that many will be deterred from obeying the law to its full extent.

Subscriptions, limited to one guinea, will be received and acknowledged by James Craig, M.D., 35, York-street, Dublin, who has consented to act as honorary treasurer.

(Signed) THOMAS W. GRIMSHAW,
President, Royal College of Physicians, Ireland.
THORNLEY STOKER,
President, Royal College of Surgeons, Ireland.
JAMES LITTLE,
President, Royal Academy of Medicine, Ireland.
AUSTIN MELDON,
President, Irish Medical Association.
H. R. SWANZY,
President, Dublin Branch, British Medical Association.
E. H. BENNETT,
Professor of Surgery, University of Dublin.
WM. THOMSON,
Senator, Royal University of Ireland.

"THE CASE OF DR. WIGHT."

To the Editors of THE LANCET.

SIRS,—*Apropos* of your excellent leading article in THE LANCET of Dec. 7th, 1895, on Dr. Wight, let me relate the following case which occurred in my practice some time ago. It was a case of placenta prævia, presenting the usual features of such cases—viz., hæmorrhage recurring at uncertain intervals for several weeks. Delivery was finally effected by version. The child was alive, and I found the placenta in the vagina and removed it without difficulty. I congratulated myself on the satisfactory termination of so anxious and troublesome a case. Alas, I reckoned without my host; my exultation was a little too premature, for in a short time unmistakable symptoms of internal hæmorrhage made their appearance. I introduced my hand and was horrified to find an extensive laceration of the uterus posteriorly. I administered restoratives—stimulants, &c.—both by mouth and rectum, more by the way of satisfying the friends that means were being used than from any hope of real benefit, as I knew nothing could save her. She died within an hour. I am utterly at a loss to account for this rupture. I have turned in some scores of cases, and seldom have I done so with less difficulty. The parts were soft and dilatable, and no force was required either in introducing the hand or in extracting the child. The only trouble I had was, the placental presentation being complete, that my fingers got entangled in the membranes and required a little gentle manipulation to extricate them. It is an unusual case, for everyone who has had much experience of midwifery knows that the uterus is an organ that will stand a good deal of rough handling innocuously. It is interesting, too, from a legal point of view, as one can easily fancy an action—either civil or criminal—arising out of such a case.

I am, Sirs, yours truly,

J. BRISBANE, M.D. Glasg.

St. John's Wood-road, N.W., Dec. 7th, 1895.

SIR HENRY HALFORD, BART., AND THE STETHOSCOPE.

To the Editors of THE LANCET.

SIRS,—There is a letter in "The Life of Sir H. Halford, Bart.," which, I think, must have more interest for those who like studying the progress of scientific medicine than any other letter in Dr. Munk's interesting work. It is the one to Dr. Sudamore (page 270), which gives us some idea

of the feeling that prevailed amongst the leading physicians in this country when the stethoscope was introduced to them. I write now to draw attention to the necessity which still exists for some scientific inquiry into the principles upon which the stethoscope should be constructed. It is clear that Sir H. Halford felt very doubtful whether we could use the sense of hearing to much advantage in the diagnosis of disease. With him it was the sight and the touch and the accounts given by sufferers that afforded all that was best for diagnosis. But that it was possible to use the ear to practical good seemed to him very reasonable, and those who can recall the way in which the stethoscope was handled by many of the physicians of the second quarter of this century, and even later, can well conceive what most of Sir H. Halford's contemporaries must have thought of it. I am thinking now of a conversation I had with my friend, the late Dr. Stone, not long before he died. If he had lived we should have had from him some valuable contributions to the understanding of how the ear can best be used to diagnose disease, for Dr. Stone was a great authority on the science of acoustics. What difference there is between the sounds that pass in a tube and those that pass along solid material is of chief importance in the construction of the stethoscope; and to me it was a matter of great interest to hear Dr. Stone affirm most positively that it is far better to listen without the stethoscope than with it—that is to say, that if the ear itself can be applied to the chest it is far better than using a stethoscope. The various sounds which are diagnostic of cardiac and pulmonary diseases, when they pass from the walls of the thorax through the stethoscope to the ear, may, some of them, be best transmitted by the air contained in a tube; while other sounds travel best through the wood or metal of which the stethoscope may be made. To distinguish clearly between these two classes of sounds, to explain how they are produced, and how the stethoscope is to be used, are matters of importance in the work of clinical teaching which does not receive the attention it ought from most of the physicians who have the care of in-patients in our hospitals.

In an out-patient room it is impossible to consider such a matter as this. Perhaps, indeed, it ought to be done only in the lectures on medicine. This, however, is a question on which opinions will differ.

I am, Sirs, yours faithfully,

Gunterstone-road, W., Dec. 3rd, 1895. ROBERT J. LEE.

THE FEES FOR THE REGISTRATION OF DIPLOMAS IN PUBLIC HEALTH.

To the Editors of THE LANCET.

SIRS,—I beg to call your attention to a regulation of the General Medical Council relating to the registration of diplomas in Public Health. After the first registration of qualifications in medicine and surgery a fee of 5*s.* is required for each additional qualification registered. In Public Health a fee of £2 is expected for the first qualification, and again a further £2 for each additional registration. Thus a man taking a D.P.H. and subsequently an M.D. in State Medicine is required to pay £4. Few people outside the Council can see the reason for charging so high a fee for registering a first qualification in Public Health; no one, I think, can show cause why for each and every additional registration an equal fee should be required.

I am, Sirs, yours truly,

Clifton, Dec. 31st, 1895. J. D. SYMES, M.D. Lond.

LIFE INSURANCE OFFICES AND THE PROFESSION.

To the Editors of THE LANCET.

SIRS,—I enclose copies of a correspondence which I have recently had with a life insurance office in London, and which I shall render anonymous, as one of the letters is marked "Confidential." As a profession we have our own internecine difficulties, which may be regarded as family differences and can usually be satisfactorily arranged with a little patience and good temper. But as a body we should, like all effective corporations, present an unbroken front to external presumption or aggression. Attacks of this character, like the "Chinee" who has passed into literature, approach "with a smile which is childlike and bland." We must not, however, be misled by such seeming innocence, but—I believe you will agree with me—repulse them with the decorum which becomes a liberal profession, and the decisiveness which belongs to a social power. It is in the hope that you will put the whole profession on their guard against an insidious form of such attacks that I place the following correspondence before you:—

"From the Manager of the —— Life Office.

"SIR,—You have been referred to for information in regard to the health and habits of Mr. ——— in connexion with a proposal for insurance on his life. The directors will, therefore, feel obliged if you will favour them in confidence with replies to the subjoined questions."

Among these are: "Does he enjoy good health, and has he a sound constitution?" "If you know or have heard of his ever having been indisposed, state the nature of the ailment or ailments by which he is affected." "Have any relatives died of consumption or other pulmonary complaint, or of any hereditary disease? If so, specify cases." "Are you aware of any other circumstances bearing upon the eligibility of his life for insurance?" To this "favour" I replied:—

"DEAR SIR,—I have received your request for particulars concerning Mr. ———. I do not gather from your communication whether the information you desire is a professional opinion or the views of a friend of Mr. ——— on the subject of his general eligibility for life insurance, inasmuch as you make no mention of the honorarium given by most offices consulting a professional man. May I inquire whether the ——— Life Assurance Society expects candidates to pay such fees? On hearing from you I shall reply to your note."

In answer to this I received the following:—

"Replying to your favour of over date, I find that the form sent to you was a private friend's report form, Mr. ——— having referred to you in that capacity. It is not, therefore, a professional opinion which we require from you, as we expect Mr. ——— will be examined by our chief medical officer to-day. Thanking you in anticipation,—Yours faithfully,—"

I may state that my knowledge of and friendship for Mr. — was that which any professional man has for a patient whom he has known for some time. I replied, therefore, as follows:—

DEAR SIR,—In reply to your note of yesterday I have pleasure in stating generally that I believe Mr. ——— eligible for life insurance; as, however, a categorical answer to the questions you have sent me involves a professional opinion, I trust you will pardon my returning them to you unanswered, together with the stamped envelope, unused, with which you were good enough to accompany your original favour. The fact of your chief medical officer examining a case, no doubt, at times appears to be sufficient to the lay mind, but I would respectfully suggest to you that under these circumstances the selection of a non-medical friend would be more in accordance with what is usually called good taste. I observe that the second portion of my note inquiring as to your usual custom as regards the remuneration of outside medical opinion remains unanswered. Quite possibly your custom is in accordance with the usage of the best offices, but, if it be not, permit me, with all deference, to add that you will consult your own best interests by treating with just consideration the profession on whose knowledge and advice, together with the coöperation of the actuary, the whole system of life insurance is based."

I am, Sirs, yours faithfully,

Nov. 29th, 1895. M.D.

THE BATTLE OF THE CLUBS.—XVI.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(Continued from p. 1671 of vol. ii., 1895.)

BIRMINGHAM: EXPLOITATION OF MEDICAL MEN BY INDIVIDUAL LAY SPECULATORS.

BY reason of its size, the different character of its various districts, the large number of its institutions and clubs, and the disorganised condition and conflicting interests of its numerous medical practitioners, Birmingham is a town that presents more than the usual difficulties besetting an inquiry concerning the clubs and medical aid societies. Moreover there is no strong medical centre where a consensus of opinion can be obtained. On the contrary, opinions are singularly divided, and I frequently found that the very institution which one medical practitioner would denounce as the most offensive and glaring of the many grievances existing was precisely the very one another medical practitioner would point out as that which gave rise to the fewest complaints. Then, to render matters still more confusing, I felt

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Aug. 24th, 1895, Brussels; (2) Aug. 31st, 1895, Brussels; (3) Sept. 21st, 1895, Portsmouth; (4) Sept. 28th, 1895, Portsmouth; (5) Oct. 5th, 1895, Eastbourne; (6) Oct. 12th, 1895, Lincoln; (7) Oct. 26th, 1895, Lincoln; (8) Nov. 2nd, 1895, Grimsby; (9) Nov. 9th, 1895, Bexhill-on-Sea; (10) Nov. 16th, 1895, Hull; (11) Nov. 23rd, 1895, Hull; (12) Dec. 7th, 1895, York; (13) Dec. 14th, 1895, Northampton; (14) Dec. 21st, 1895, Fermanagh Medico-Ethical Association; (15) Dec. 28th, 1895, Northampton.

myself bound to acknowledge that both these opinions were perfectly correct, though diametrically opposed. So much depends upon the initial point of view. An institution may be criticised on theoretical, professional, or ethical grounds, or else from the personal, selfish, practical, pecuniary standpoint. The result of such criticism will very generally depend on the basis of the argument, though, in both cases, the facts dealt with are identically the same. To illustrate this conflict of opinion I must at once deal with a phase of contract work I have not as yet encountered in any of the other towns visited. This was brought to my notice by Dr. Leslie Phillips, whose name has long been associated with the campaign against medical aid societies. Not only is the medical profession exploited first by the friendly societies and then by large speculative companies who organise medical aid and employ medical men as a bait to obtain life and other insurances, but there are at Birmingham private individuals (laymen) who make large incomes out of the work they place in the hands of medical men. It would seem as if medical men are so incapable of attending to their own business that laymen must needs come and do it for them, pocketing, of course, a large share of the profits as the reward of their labour and greater organising capacities. Now at Birmingham there are two such men, whom I will designate Mr. Y and Mr. Z. In a communication submitted to the General Medical Council,[2] Dr. Leslie Phillips writes: "As examples of the individual ownership of a medical aid association the following local instances may be given. The South Birmingham Medical Aid Association belongs to Mr. Y; the business is conducted by 'touts' and house-to-house canvassers; he receives for each patient 1*d*. per week, or 4*s*. 4*d*. a year, and pays the surgeons 3*s*. a year. I am informed that this man has about forty to fifty agents at work for him. The Edgbaston Medical Self-supporting Society belongs to Mr. Z. The circular of this business contains the following: 'There are upwards of 2000 members contributing 1*d*. each, Mr. Z being responsible for the quarterly fees of the members to each of the medical gentlemen. In this self-supporting institution there are no officers, no committee, no medical staff, no drug stores, no heart-burnings, no jealousies.' It might have been added, 'There is only the proprietor of the business—Mr. Z.' The circular contains an 'Ode to Genius.'"

This is certainly a terrible picture. Here are two men who have absolutely nothing to do with the medical profession, and yet who are exploiting medical men wholesale and making incomes out of their skill and their work. I obtained a card of membership of Mr. Y's society, and I found that it was entitled "The Minerva" Medical Aid Society and boasted of being "the largest medical aid society in the midlands." It was established in 1875, and reconstituted in 1887. An entrance fee of 3*d*. for single persons and 6*d*. for a family is charged. Then there is 1*d*. to pay for the card. Ordinary members pay 1*d*. per week, and are admitted from the age of three months to sixty-five years. Sixpence per week is charged for a family. Special members pay 2*d*. per week; they are, for the most part, more than sixty-five years old. According to the printed rules patients must visit the medical officers in their surgeries from 9 to 10 A.M. or from 6 to 8 P.M., and messages for home visits must be sent before 10 A.M. Persons who apply for entrance must be approved by the medical officers. This latter is an important clause and should be very strictly observed, but one of the medical men, who was both in Mr. Z's and in Mr. Y's service, assured me that the rule was enforced only by the former and totally neglected by the latter. It is said that Mr. Y's society has no less than 30,000 members. On the card of membership, which I possess, there is a list of thirty-three medical practitioners residing in and about Birmingham. Then there is a further list of sixteen medical men in Mr. Y's service, of whom three are at Wallsall, two at Wolverhampton, two at West Bromwich, two at Smethwick, and the others at Halesowen, Bloxwich, Oldbury, Wednesbury, Netherton, and Bromsgrove. Mr. Y is supposed to pay 3*s*. per member per annum to his medical officers, but on examining an account which he had rendered to one of his medical officers I found that he had deducted from the total a discount of two per cent. The reason for this practice was not stated Then, out of a list of only a little over 400 members, somewhat over fifty were struck off as having lapsed. This lapsing in payments is as disastrous to the medical officer as it is advantageous to his employer. For as many weeks as the members pay the medical officer has to give medical attendance when required; but, unless the whole of the thirteen weeks which compose the quarter are paid, the medical man gets nothing at all, and the entire sum goes into his employer's pocket. Instead of receiving about two-thirds of the payments effected, the medical man gets nothing. Taking this into consideration, together with the fact that the medical officer must, at his own expense, provide all the necessary drugs, it will be seen that the net profits fall short of 2*s*. per annum per member. Naturally it is not in the interest of these organisers of medical aid to establish any wage limit. They are not medical men, and they have no motive or advantage in protecting either the interests or the dignity of the medical profession. They must enroll as many members as possible, and naturally they will put no restraint on the efforts of their canvassers. These latter, being paid on commission and on the money they collect, call from house to house and employ any sort of argument that will persuade people to join their society. What do questions of professional etiquette matter to these canvassers and their employers? They belong to no profession and have no professional standing or reputation to maintain. It seems, however, a farce to say that medical men must not canvass, tout, or advertise, and yet here are forty-nine medical men working for Mr. Y, who with his agents undoubtedly does tout, canvass, and advertise, and this so as to secure patients for these medical men, together with a good commission for himself and his agents. That a certain amount of canvassing and advertising should be done on behalf of benevolent institutions—such as, for instance, a friendly society organised exclusively for the benefit of working men—may perhaps be admissible. But here there is no pretence of benevolence. This is a business in which laymen make their fortunes, or in any case earn very comfortable livelihoods.

With all these facts before me I naturally concluded that there was here a legitimate grievance, which was assuming gigantic proportions. Doubtless, if I saw some of the medical men in the service of Mr. Z or Mr. Y, they would unfold a terrible tale, and I should have a thrilling story of woe and degradation to relate. The first person I saw was a practitioner who had been in Mr. Z's service for some time, but was now no longer on his list. He was, therefore, quite free to speak out exactly what he thought, being absolutely independent of Mr. Z or of any other similar employers. To my surprise, however, he had no complaint whatsoever to make. He thought Mr. Z acted quite fairly and did the best he could under difficult circumstances. He was confident that there was no abuse; on the contrary, Mr. Z had the talent and genius of reaching a section of the population which no one else could attain. He extracted pennies from the lowest class of people which would otherwise be utterly lost to the profession. He not only enriched the profession to that extent, but he rendered a great public service by keeping from the hospital and the workhouse infirmary people who, but for his efforts, would undoubtedly depend exclusively on public charities or Poor-law aid. Mr. Z was to the profession what the Salvation Army was to religion: he managed to awaken among the lowest of the low some sense of duty, taught the lesson of thrift, and extracted pennies from the most barren soil.

Somewhat disconcerted by this very unexpected answer to my questions, I hastened to call on another practitioner whom I knew to have been likewise in Mr. Z's service. He also declared that there was no abuse; the members of Mr. Z's society were all very poor people. In respect to the money earned he was not so satisfied. Mr. Z paid very regularly, sending his cheque punctually each quarter, but there was no account rendered, and no details were given. It appeared also that about £14 per quarter was the utmost to be obtained in his service. If any of the medical men in his service asked for some explanation Mr. Z produced a ponderous volume containing a perplexing and terrible array of figures. To attempt to unravel the meaning of these accounts was a task so complicated and appalling that my informant very promptly gave up all effort to solve such a conundrum. He was content to receive the cheques without further question, satisfied with the fact that he earned the money with a minimum of trouble. Indeed, Mr. Z makes no empty boast when he says on his

[2] Appendix to Minutes Report on Medical Aid Associations, May, 1893, page 10.

prospectus that "there are no officers, no committee, no medical staff, no drug stores, no heart burnings, no jealousies." In so far as the peace of mind of the medical officers is concerned, institutions run for private personal profit, such as those of Mr. Y and Mr. Z, offer very great advantages over benevolent or friendly societies. Such men have every interest to smooth over difficulties and to pacify the dissatisfied. If a member complains that he has been neglected by the medical officer, Mr. Y or Mr. Z will defend his employé against his customer, just as a shopman will argue that his goods are of excellent quality in spite of the complaints and the fault-finding of dissatisfied purchasers. The medical officer's virtues will be extolled, excuses be found for any neglect, and complaints be qualified as exaggerated. If this does not suffice, and the worst comes to the worst, the complaining member will be told that he can, if he wishes, have his name put on the list of some other practitioner. Thus it very rarely happens that the medical officers hear of any complaints, and they have a much easier time when working for a Mr. Y or for a Mr. Z than if they are in the service of a friendlysociety or of a provident institution governed by an elected committee.

This opinion was confirmed by another practitioner who had been for several years in the service of some Birmingham friendly societies. Rarely have I met anyone who spoke so bitterly and resentfully against this sort of practice. He had worked under the orders of a committee of forty working men. In one day he had done as much as five hours' work in the surgery and then had ten hours' riding to the private dwellings of the various patients. Drawing out his note-book, and taking a week at haphazard, he found that his visits had taken up for the six days 10, 6, 7¾, 6, 7¾, and 8 hours respectively, besides five hours in the surgery each day to receive patients. Then, by way of rest, he had to appear in the evening in the back parlour of some public-house, where a committee of rough workmen, sometimes none the better disposed for the drink they had been taking, sat in judgment upon him. These men got 1*s.* for attending the committee meetings, and the most trivial complaint against the medical officer is a good pretext for spending an evenin at the public-house with 1*s.* each to cover the expense of the drinks. A larger fee is given when a deputation is appointed to call on the medical officer, who is consequently often disturbed by a troop of men coming to his house to discuss some very trivial matter. A shilling fee may be qualified as a very small sum, but it is of considerable importance to men who are earning only 25*s.* or 30*s.* a week. The fact also that such societies very frequently meet in public-houses has a very disastrous effect. Many a time members of the committee were quite drunk when they heckled the unfortunate medical officer summoned to appear before them. These committees, my informant insisted, render few or no services. They are not wanted. At most a secretary is needed to receive the subscriptions, and in many cases the medical men could themselves receive the subscriptions, thus dispensing with the services of even this functionary.

To return to Mr. Y and Mr. Z. The latter appears to be the more popular of the two. Thus if a vacancy occurs on his staff of medical officers, he consults the remaining ones and is guided by their advice in making a new appointment. As for the share these two men take for themselves, this is not considered excessive. The cost and labour of canvassing are very considerable; and as a class of people are reached that are not worked by any other agency this service merits an adequate remuneration. These men are "captains of industry," organisers of a business; "sweaters," if it be any satisfaction to dub them with this name; but they are almost a commercial necessity in a commercial world. The real question is whether medical men can be considered as belonging to a commercial world. For my part, I cannot but fancy that there has been too much carelessness in these matters, and this has resulted in a tendency to run with the hare and hunt with the hounds. Medical men have thoughtlessly allowed themselves to be dragged into the arena as if they were ordinary commercial men running a business; then, when the laws that govern business competition begin to hit them too hard, they discover, but perhaps too late, that they are professional men and should not be "sweated" or subjected to unlimited competition, and should not be employed like mere workmen by companies, by capitalists, or by "captains of industry." Then, but again too late, it is found that they cannot do their duty to their profession or to the public: that, having lost their independence by becoming the employés, the "wage slaves," of some commercial concern, they are not able to do their work conscientiously. They have to please their masters and not their patients. They are no longer the guardians of public health, but the promoters of a private business. Their concern is with the profits that must flow to their employers' pockets and not with the health of their patients. They cannot serve God and Mammon; they must satisfy their employers or lose their position.

(To be continued.)

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Coronership for the Salford Borough and Salford Hundred.

THIS dual appointment, now vacant by the death of Mr. F. Price, will shortly be filled up by the Salford borough council for the borough and by the county council for the hundred. Preference will be given to candidates who will undertake to have an office in the borough and to calculate mileage from the Salford Town-hall. For the borough coronership applications will be received by the town clerk up to Jan. 8th. Mr. J. F. Price, the son of the late coroner, who has for some time acted as his father's deputy, is one of the candidates for the dual appointment. Other names have been mentioned, but the only medical candidate is Dr. J. G. Gledhill, barrister-at-law, of the Northern Circuit. He takes an active interest in the social politics of the medical profession and is from his qualifications in medicine and law specially fitted for a position where both are required.

Monsall Fever Hospital.

The final stage, so far as the infirmary authorities are concerned, in the arrangement for the transfer of the Fever Hospital and estate to the Manchester Corporation was reached a few days ago. At the meeting of the board of management held on Dec. 30th, Mr. E. S. Heywood being in the chair, it was reported that at a special meeting on Dec. 16th the following resolution was passed: "That upon the recommendation of the committee of Monsall Fever Hospital the agreement between the Manchester Royal Infirmary and the Corporation of Manchester, now submitted, for the transfer to the latter body of Monsall Fever Hospital and estate, and for the repeal of the Act of Parliament uniting the Manchester House of Recovery with the Manchester Royal Infirmary (15th Vict., c. 3, May 28th, 1852) be and is hereby approved and adopted, conditional on the same being confirmed by Parliament; and it is further resolved that the corporate seal of the institution be affixed to the said agreement after notification has been received of its formal adoption by the Manchester Corporation."

Salford Sewage.

It seems as if Salford were at length coming to a decision as to a scheme for sewage purification. By an order of court, obtained by the Mersey and Irwell Committee, the corporation was obliged within a short time to lay its scheme before Judge Parry, so that it was driven into a corner. Experiments in sewage treatment must have been carried on for more than six years, and the results of about thirty processes have been carefully noted. Salford has been ridiculed for this; but if she has not gained much the experiments have had some educational value and have been followed with attention by municipal authorities in various parts of the country. One reason for the long continuance of these experiments was that those schemes which seemed most efficient were also costly, and it was hoped that some equally good, but less expensive, method would be discovered. Mr. Corbett's report is the outcome of all these various experiments, and he believes that his scheme is more efficient and less costly than any that have been tried. It is a combination of precipitation and filtration. He deals, firstly, with the removal of sludge from the precipitation tanks without interrupting their continuous use, describing the apparatus as "a travelling scoop, a pontoon with traversing gear, and pliable pipes to convey the sludge to iron pipes leading to the open channel for filling the new sludge tanks." The compressed sludge is to be taken by the corporation steamer out to sea by the Ship Canal. The second point is the provision of "roughing filters" for straining particles of solid matter from the tank

effluent. The report says: "The long-continued experiment with the model roughing filters, dealing with 12,000 gals. per square yard per day, and cleansed by upward washing and surface raking, have completely proved the efficiency of such simple and inexpensive filters for removing any visible particles of solid matter from the tank effluent. It was found practicable, indeed, to run these filters at the rate of 40,000 gallons per square yard per day with a head of about two feet of water over a filter of three feet of sand; but, of course, the efficiency of the filter is greater with the more moderate flow." Provision is made for the mechanical cleansing of these filters by an engine and sand-washing machinery travelling on the filter side walls. The work done by these filters would be somewhat similar to that done by the coke-breeze filters at the Glasgow sewage works. "The borough analyst's report of numerous analyses of effluents from the experimental roughing filters on this system show an almost complete removal of all matters in suspension, and a slight reduction in the albuminoid ammonia as compared with the tank effluent before rough filtering." Thirdly, the final filtration of the clarified effluent is discussed. At Wakefield for many years the town was supplied with water from the foul river, filtered through a couple of filters, used and rested alternately, filled with sand and magnetic carbide, a material similar to that now called "polarite." Until recently the efficiency of these filters was generally credited to their special material, but it is now known to have been due to their intermittent use, "inducing a growth of air-breathing bacteria, which transformed the offensive sewage elements into harmless products." This result is borne out by experiments carried on for the past three years by the London County Council, and by the experience at Laurence, Massachusetts, where the water-filters are constructed on this aerating principle. But such experiments show also that insoluble substances gradually accumulate, and a glutinous substance is formed by aggregations of bacteria, so that provision must be made for washing or renewing the filtering material. The results of numerous investigations indicate that "the essentials of a sewage-filter are—(1) a hard, granular, durable material free from very fine particles, such as sharp sand with the finest grains riddled out, or coke breeze, or cinders, or crushed brick with the fine dust riddled out; (2) arrangements for intermittent use, with thorough drainage and aeration in the intervals of rest at least once a day, and preferably many times a day; (3) a flow of not more than 1000 gals. per square yard per day while in use, with five feet depth of filtering materials." The effluent from the "roughing filters" is taken by pipes to the aerated filters, which cover a large area, to one-third or to two-thirds of which it can be distributed over the surface of the filters by a network of iron pipes with spray jets. Each third of the area can be aerated once a day or oftener. A sand-washing engine will be in constant use on these aerated filters. After this final filtration the effluent enters a culvert discharging into a small fish-pond, where its purity will be always visible, and from this it is to pass "over a long weir in one side of the intercepting sewer outfall culvert, and so into the Ship Canal." This scheme, of which I have given a very imperfect sketch, was adopted yesterday at a special meeting of the Salford Town Council, giving the committee, however, the discretionary power to increase the size of the aerating filters by 4000 square yards. The estimated cost is £50,000, and the cost of maintenance is put down at £3000 a year.

Dec. 31st, 1895.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Christmas and Charity.

THE Christmas Hot-pot Fund, which was started ten years ago during the mayoralty of Sir David Radcliffe, has this year been enabled by the generosity of the public to provide 5000 hot-pots (an increase of 1000, in consequence of the extension of the city). Each hot-pot contained 12 lb. of food, comprising 3 lb. of beef free from bone, potatoes, and onions. In all, 21,422 lb. of beef, 26 tons of potatoes, and 2½ tons of onions were distributed. Each family received in addition to the hot-pot a 4 lb. loaf of bread, ¼ lb. of tea, and a jar of jam. Lord Derby, in his official capacity of Lord Mayor, took great interest in the work.

The Stipendiary Magistrate and Neglected Children.

Mr. W. J. Stewart, the stipendiary magistrate, has for several years past taken special notice of neglected children, many of whom are brought before him by the police for "sleeping out," and for selling papers, matches, &c., after prohibited hours. No fewer than forty-five such children appeared in court on Dec. 26th, and he said that while he did not like to inflict punishment upon parents who were guilty only of an isolated act of cruelty to or neglect of their children, he found that in cases where the parents were addicted to drink a long period of imprisonment had a very salutary effect.

Alleged Wife Murder by a Dentist.

An inquest was held by the city coroner on Dec. 30th upon the body of the wife of Herbert Westworth, surgeon dentist of this city. She died on the 13th from internal violence which could not have been self-inflicted, and the jury returned a verdict of wilful murder against the husband.

Dec. 31st, 1895.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Action with regard to Edinburgh Refuse Destructors.

AN action was raised some months ago against the corporation of Edinburgh relative to the refuse destructor at Powder-hall by the trustees of Mr. Alexander of Redbraes, a property adjoining or close to the ground on which the destructor complained of is situated. The complaint was that the destructor was so managed that it was a nuisance; and that noxious vapours, dust, half-burnt paper, and other matter were disseminated by it, passing over or falling upon the land. Lord Stormonth-Darling had found in August last that the process of burning city refuse in the destructor had created a nuisance, and the pursuers were entitled to expenses. The question of expenses was raised the other day, and in disposing of objections to these his lordship said that in this case there had been a great waste of public money, for which the defenders were mainly responsible. They had stated in their defence that the destructor was apt and sufficient for the complete destruction of all the refuse sent to it, but this they had entirely failed to prove. It is said that this action will cost the corporation about £3000. It will probably have the effect of making those responsible somewhat more careful in the working of the destructors.

The Temporary Hospital in the Queen's-park, Edinburgh.

Part of the temporary hospital in the Queen's-park has been taken to pieces, but the portion of it used for small-pox patients has been destroyed by fire as it stood. The authorities may be congratulated on their action in this matter.

A Lady Manager for the Edinburgh Royal Infirmary.

Miss Flora Stevenson has been requested, and has consented to be, a candidate for a seat on the board of management of the Royal Infirmary. The election takes place early in January by the board of contributors. Her candidature is supported by the *Scotsman* newspaper, and it is extremely probable that she will be elected.

New Convalescent Hospital near Aberdeen.

The site of the new convalescent hospital in connexion with Aberdeen Royal Infirmary lies on the Craigton road, about a mile from the suburban railway station at Cults. The building will consist of two storeys, with cross wings at each end and a back wing. Along the whole length of the main block front will run a glass-roofed verandah, supported on wooden pillars. The ground floor accommodation of the main building provides for separation rooms, sisters' rooms, and rooms for lame patients, and that of the wings provides spacious sitting-rooms for male and female patients respectively. The patients' dormitories are on the first floor of the wings, and on the first floor of the main block are sisters' bedrooms and association and separation rooms. The back wing contains on the ground floor a large dining-hall, with kitchen, scullery, and stores in the rear, and on the first floor accommodation for the staff. The total of the accepted tenders for the erection is £4100, which is exclusive of furnishings.

City Hospital, Aberdeen.

The extension of the City Hospital, Aberdeen, was opened, on Dec. 21st, by Lord Provost Mearns in presence of a numerous company, including a considerable number of medical practitioners. Much interest was shown in the

ambulance vans, Lyons's patent disinfector, the laundry machinery, and the mechanical heating and ventilating apparatus. In the course of the evening Sister Isabel, in the name of the nursing staff, presented a handsome silver inkstand to Professor Matthew Hay, M.D., medical officer of health of the city and superintendent of the hospital.

Dec. 31st, 1895.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Private Hospital Case.

THE case known as the Fitzwilliam-square injunction case, which was watched with so much interest by the public and the profession here, has at last been decided. It will be remembered that in last April the Earl of Pembroke obtained a decree from the Vice-Chancellor by which an injunction was granted to restrain the defendant, Mrs. Perry, from using the house, 28, Fitzwilliam-square, as a private hospital in opposition to a covenant contained in a lease dated June, 1882. The case was at hearing for many days and was much discussed. It was known that the decision would affect not alone the inhabitants and owners of all the houses in Fitzwilliam-square who hold under a similar covenant, but the majority of the houses in Merrion-square and in the best parts of Dublin. An appeal was lodged against the Vice-Chancellor's decree, and after a prolonged trial and protracted delay judgment has at last been given supporting the original decree and against the defendant. The Lord Chief Justice delivered a long and elaborate judgment, in which he quoted the covenant, which is to be found in print in the lease of the house in which I write, as in that of the neighbouring houses, as follows:—"The said lessee, for himself, his heirs, executors, administrators, and assigns, doth covenant, promise, grant, and agree to, and with the said earl or the person or persons who may for the time being be entitled as aforesaid, that neither he, the said lessee, his heirs, executors, administrators, or assigns, nor any of them during the said term of 150 years, shall employ or use any part of the front of said houses as a shop, or follow or carry on, or permit or suffer to be followed or carried on in the said houses or on any part of the said demised premises, the business of a tavern, alehouse, soap boiler, chandler, baker, butcher, distiller, sugar baker, brewer, druggist, apothecary, tanner, skinner, lime burner, hatter, silversmith, coppersmith, pewterer, blacksmith, or any other offensive or noisy trade, business, or profession whatsoever." He relied to a considerable extent on the final words of this covenant and held that in the meaning of the lessor a hospital situated as it was proposed to locate this one was "offensive." What, he asks, would be the position of the next-door proprietor? If he was a person of ordinary humanity he would not use his house for the purpose of giving practically any entertainment. He would not give a ball or musical party, which I assume it is the privilege of those resident in Fitzwilliam-square to give. If he abstained from giving entertainments which would be attended with noise, through regard to the sufferers next door, he would certainly be restricted in the use of his own house, and if he did not abstain his feelings would not be of an enviable description. In alluding to the medical evidence in the case, which was of a rather conflicting character, the Lord Chief Justice turned to the affidavit of Dr. Wheeler, which states: "I have had considerable professional acquaintance and connexion with the class of institutions known as private hospitals or homes for patients, and although I am aware that the most of such institutions profess not to take in infectious cases for treatment, and do not allege that they would deliberately do so, I am convinced that it is practically impossible altogether to exclude such infectious cases, even with the greatest care and supervision on the part of the managers of such hospitals or homes, and that this would be especially so in the case of a home managed by a lady who had herself not any direct connexion with the medical or surgical treatment or nursing of the patients' cases, which, appearing perfectly harmless when admitted, may develop into small-pox, scarlet fever, or other infectious disorders of the most virulent type. Tuberculous disease in particular not infrequently results from other maladies which in their inception are apparently quite harmless." Lord Justice Walker concurred with the Lord Chief Justice, while Lord Justice Fitzgibbon, the third Member of the Court of Appeal, took a somewhat different view. The matter is now, however, decided by the action of the majority, and inasmuch as no intention of appeal to the House of Lords has been stated the decision is final.

Christmas at the Belfast Hospitals.

The patients at the Royal Hospital were entertained with a substantial dinner, and at the Belfast Hospital for Sick Children there was an "at home" with Christmas trees for the children on Friday, Dec. 27th.

Belfast Royal Hospital.

From the annual report of the Working Men's Committee I find that, while seven years ago it consisted of thirty members, now there are 120. At that period the working classes subscribed £1563; now, during the past year, a sum of £2403 was realised.

The Battle of the Clubs at Cork.

The question has arisen as to whether it would not be well to form a benefit club to be managed and controlled practically by a committee of the profession. Similar clubs have been successfully established in England, and some time ago the committee of the profession appointed a sub-committee who produced an admirable scheme, showing that very great attention had been paid to the minutest details. The committee approved of the report of the sub-committee and recommended it for adoption. A meeting of the profession was accordingly held on Dec. 30th, and after a prolonged debate it was found that a majority of six were in favour of forming the club, but as, in accordance with the rules, there should be a three-fourths majority to permit of the rescinding of an existing rule the proposal has for the present been rejected.

The Royal University, Ireland.

The senate of the Royal University recently decided to require medical students to pass an examination in clinical medicine and surgery at the end of their third year, and this regulation has caused considerable dissatisfaction. Many medical teachers hold that this is a retrograde movement: that the fifth year of study has been added to the student's curriculum mainly in order that he should have ample time for gaining a thorough practical knowledge after he had satisfied his examiners that he had sufficiently mastered the theoretical branches of the profession. A movement is already on foot in Cork to make representations to the senate of the Royal University on the subject.

Dec. 29th, 1895.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A New Method of isolating the Enteric Fever Bacillus.

ALTHOUGH the bacillus of enteric fever was discovered several years ago, no method has until recently been devised for easily and quickly recognising it and isolating it from other bacteria. According to Professor Brieger more than 700 articles and memoirs have been published dealing with the matter, but none of them answers the requirements of clinical practice. A very simple and certain method has, however, been lately discovered by Dr. Elsner, assistant physician at Professor Koch's bacteriological institute. After boiling gelatin together with an infusion of potatoes he adds a quantity of soda and filters and sterilises the mixture, which is then put into tubes filled with a one per cent. solution of iodide of potassium. The tubes are then inoculated with the dejecta, and the gelatin is deposited on glass plates in the usual way. The researches of Dr. Elsner have proved that all bacteria perish in the iodide of potassium gelatin except the bacillus of enteric fever and the bacterium coli commune. After twenty-four hours the bacillus of enteric fever is scarcely visible on the gelatin, but the colonies of bacterium coli are already somewhat large at this period. After forty-eight hours the colonies of the enteric fever bacillus become visible as small clear masses like drops of water, whereas those of the bacterium coli are large and of a dark-brown colour. No other bacteria of the dejecta besides the two above-named are to be seen. Dr. Elsner has published twelve cases where he found the bacillus after forty-eight hours in every stage of the illness. The number of the bacilli decreased as soon as the temperature became lower. In one case complicated with thrombosis of both crural veins they were present even after thirty-eight days. If after the cessation of the fever the

bacilli are still visible in considerable quantity a relapse is probable. Professor Brieger suggests that the dejecta of persons who have to do with enteric fever patients, such as nurses, servants, &c., should be regularly examined. If bacilli are found these persons must be supposed to be in the stage of incubation, and full doses of calomel may be able to prevent the development of the illness. The great importance of Dr. Elsner's discovery from a prophylactic and therapeutic point of view is obvious.

The "Practical Year" of Medical Study.

As I explained in my article in THE LANCET of Sept. 14th, 1895, German students do not receive a sufficient amount of practical training in medicine and surgery. The university clinics and hospitals in the larger towns are overcrowded with students, whilst in the smaller universities the patients are often too few to afford the needful clinical experience. The majority of students, therefore, enter into practice with a good theoretical education, but without the necessary skill in practical matters. For a long time past the leaders of the profession have been of opinion that this state of affairs should be improved, and the Practitioners' Association at two of their annual meetings have asked the Government to consider the question. It would seem natural that additional medical schools should be established in connexion with the larger hospitals which hitherto have not been used for teaching purposes, but this is impossible without a total revolution in the system of medical education, which entirely centres in the universities. As the students are obliged to attend the university hospitals and clinics exclusively, an effective practical training cannot be obtained until the curriculum at the university is completed, and another expedient has, therefore, been proposed. According to the suggestions of the Practitioners' Association the students should be required to spend a so-called "practical year" in one or more hospitals; and this system, which somewhat resembles the "internat" in France, will probably be adopted in the new regulations to be issued by the Federal Council. There is a difference of opinion as to whether this hospital course should come before or after the *Staatsexamen*, but all agree that a full qualification should not be conferred prior to the completion of the compulsory clinical practice. Professor Krabler of Greifswald, who acted as reporter on this question at the meeting of the Practitioners' Association, has published a detailed scheme in the *Deutsche Medicinische Wochenschrift*. According to this plan the young medical men after having passed the *Staatsexamen* would be required to act as *Hilfsaerzte* (assistant medical officers) for one year in public or private hospitals containing more than fifty beds, and a list of these hospitals would be published every year by the Imperial Chancellor. In this list not only the general hospitals but also special hospitals for diseases of the eyes, throat, &c., lunatic asylums, and lying-in hospitals should be included, but hydropathic, orthopædic, and similar establishments would be omitted. The number of the *Hilfsaerzte* is to be fixed for every hospital, and they would, if possible, board in the hospitals at moderate charges; those who have passed the best examination would for this purpose receive an allowance from the Treasury. The chief medical officers of the hospitals would control the work of the young men and give certificates. Professor Eulenburg proposes that an additional oral examination should be passed after the end of the hospital practice before an examining board consisting of university professors, medical officers of health, and practising members of the profession.

Over-pressure in Schools.

Complaints of over-pressure in schools have been made for a long time past, and the development of hygiene together with the increasing interest of the public in sanitary matters has rendered parents more and more nervous. In Germany many subjects are included in the school training which in other countries are taught in the universities; the number of daily lessons is, therefore, usually very great, and the weaker pupils often suffer from the over-exertion. In the *Deutsche Medicinische Wochenschrift* Professor Eulenburg criticises the time-table of a well-known Berlin "gymnasium," where the sixth class has thirty-three lessons weekly. On one day the pupils have six consecutive hours of study with only two intervals of ten and fifteen minutes respectively; there are also afternoon lessons on two days, and the pupils have to go to school twice a day. Dr. Herter of Frankfort complains of similar evils at a "gymnasium" of that town. Dr. Eulenburg points out that according to the researches of Griesbach the brain of an over-exerted child requires several hours of rest till it regains its normal faculties, and Burgerstein has stated that boys of twelve years of age require, as a rule, an interval of several minutes after forty minutes devoted to study; but the opinions of these eminent men seem to have little weight with the school authorities. Both the medical profession and the public have on several occasions asked for the establishment of medical supervision in connexion with the schools, but the school authorities, actuated by *esprit de corps*, have always been opposed to the interference of medical men in what they believe to be their own domain. The facts and opinions above enumerated, however, prove that the coöperation of medical men and school teachers is sometimes very essential.

Dec. 29th, 1895.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Dr. Edgardo Jacopetti.

AMONG the *immortelles* which Italian journalism is showering on the graves of the fallen at Amba-Alagi few are better merited than that dedicated to Dr. Edgardo Jacopetti, lieutenant on the medical staff of the expeditionary force, and killed with Major Toselli and sixteen brother officers in that sanguinary engagement. He was a native of Fivizzano, in the province of Massa-Carrara, and as an army surgeon and officer reflected high credit on the Tuscan school in which he was trained. He was not new to Abyssinian warfare, having been a member of the special expeditionary corps which was sent to the front in 1887-88. He then distinguished himself by his coolness in danger, his professional skill on the field, and the confidence he inspired in the sick and wounded under his care. In June last he was enrolled in the second battalion of native troops, in succession to Lieutenant-Surgeon Virdia. That gallant company died nearly as one man on the day of Amba-Alagi, and, after doing his best and last for the wounded, he also fell sword in hand. He was in his thirty-third year and met a fate similar to that of two other distinguished members of the army medical staff, Captain Nicola Gasparri and Lieutenant Augusto Ferretto, both of whom died a soldier's death on the fatal field of Dogali.

The University Riot.

The recent reverse that has befallen the Italian army at Amba-Alagi has evoked anti-ministerial demonstrations from many of the students who, at a meeting in the Aula Magna for the commemoration of the fallen, interrupted the spokesman of the occasion (Professor Semeraro) with shouts of "Abbasso la politica Africana!" "Abbasso Crispi!" "Evviva Menelik!" This rude outburst proceeded from the "Socialists," who, headed by a student (Cherubini, by name), made the solemn function of the day impossible. A chair was thrown at the ringleader, and in a moment every similar piece of furniture in the hall was broken up and used as a missile, amid the havoc of chandeliers and other ornaments, till a regular pitched battle was fought out between the "Africanists" (those who back up Crispi's colonial policy) and the "Anti-Africanists" (the Socialist group referred to). The latter were at length hustled out of the hall, in a bruised and battered condition, and then their victors formed in procession to the Piazza dei Cinque Cento, there to deposit immortelles on the Dogali monument. The university authorities will have to take stronger measures than hitherto for the summary and final prevention of these scandals.

The Italian Red Cross.

The President of the Croce Rossa Italiana, in view of the late military reverse in Africa, has arranged for the second mountain ambulance lately lying in readiness here to be despatched to the front by the steamer now on its way from Naples to Massowah. Like its predecessor, which left these shores for the seat of war in September last, this ambulance, similarly equipped, is due to the liberality of the sub-committee of the Red Cross at Turin. The same sub-committee, in concert with the central committee, is at present fitting out a third ambulance for a similar destination. A strong organisation has also been formed at Palermo for the provision of money and *matériel*.

The Tiber in Flood.

The torrential downpour of the last few days has swollen

the tributaries of the Tiber, notably the Paglia and the Anio, to such a height that the lands below the city are submerged, particularly on the levels of S. Paolo fuori le Mura. Within the walls the site and immediate surroundings of the Pantheon are the only parts really flooded. The island, famous in medical history for its Temple of Æsculapius, and lately converted into a peninsula, has been made an island once more; and well would it be for the archæologist, the artist, and, above all, for the sanitarian, if this separation between it and the left bank were not temporary but permanent. The water now careers between the island and the embankment and has made a clean sweep of the miasmatous mud and the frogs that frequented it. Dr. Baccelli, when the Eleventh International Congress sat in Rome, was interviewed by medical archæologists and others interested in the island with a view to the removal of the connexion with the river bank, but nothing has yet been attempted.

The Acqua Acetosa.

Our Accademia Medica is making a laudable endeavour to restore the Acqua Acetosa to its ancient popularity. Professor Colasanti, in whose laboratory a careful analysis has been made by Dr. Feliciani, read a report on the subject to the Accademia in plenary session. The water contains chloride of sodium, chloride of potassium, chloride of lithium, chloride of magnesium, nitrate of potash, and borate of soda. In amount of lithia it is little inferior to the waters of Carlsbad or Uliveto. The spring is in a suburb of Rome.

Dec. 28th, 1895.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Clinical Teaching of Ophthalmology.

AT the opening of the Medical College at Innsbrück Professor Dimmer delivered an address on the clinical teaching of ophthalmology. Clinical instructors should keep in mind that students are not to be trained as specialists but as practical physicians, and particular attention should be given to the examination of the external parts of the eyes, the lids, the lacrymal sac, the mobility of the eyeball, and the use of the ophthalmoscope. At Vienna, where the far-famed Jaeger worked at his well-known Atlas of Ophthalmoscopy, there are a great many students who are not competent to use the ophthalmoscope. The student ought to be able to examine the state of the eye, to specify the spectacles required for a patient, to estimate refraction by means of skiascopy, to ascertain the perception of light in cases of cataract, and to define the field of vision. Eversion of the eyelids, touching of the cornea, sounding of the lacrymal sac, and the removal of foreign bodies from the conjunctiva and the cornea, are operations which ought to be performed by the student on patients; but puncture of the cornea, enucleation of the eyeball, canthoplastic operations, tarsorraphy, and the operations for ectropium and entropium should be practised on the dead body. Sterilisation of eye-washes and antisepsis and asepsis in operations are also of great importance. Complicated operations, such as the extraction of cataract, iridectomy, and the treatment of strabismus, are not to be performed by students, but only by those who have passed some years in an ophthalmic hospital. Teaching ought never to be purely theoretical but should be illustrated by cases exhibited and demonstrated, so that every student may see the important symptoms. Professor Dimmer, therefore, agreed with the opinion of the late Professor Billroth, who considered that fifty students were the maximum number for a clinical class. In referring to the teaching of ophthalmology in other countries he pointed out that in France, Great Britain, Spain, and Denmark there is no special examination in this subject; in Austria lectures are delivered five times a week (ten hours altogether), and the examination consists of a practical and an oral part and lasts for fifteen minutes. Professor Dimmer advocated a practical examination such as is held in Germany, where this examination lasts three days, during which time the student has to investigate the history of the cases and to diagnose their nature. He concluded with Billroth's saying: Teaching is a satisfaction for everyone who has devoted himself to science, but examining is a torture.

The Sexual Relations of the Thyroid Gland.

At the last meeting of the Vienna Medical Club a highly interesting paper was read by Dr. Fischer, in the course of which he remarked that the relations between the thyroid gland and the female sexual organs have often been discussed since attention was directed to the fact that goitre predominated in women and that from 80 to 90 per cent. of the cases occurred in females. Myxœdema, moreover, is met with in women in 86 per cent. of the cases. The same thing is found in Graves's disease, and in respect of sclerodermatic processes the proportion as between women and men is three to one. Swelling of the thyroid gland has been observed in puberty and at the commencement of the menstrual period. Freund found an increase of this gland during pregnancy in forty-five out of fifty cases, and Wölfler has described a case in which during pregnancy the trachea became soft and the goitre increased. Goitres also increase during delivery and decrease again some days afterwards. Graves's disease also, if it develops during pregnancy, improves after delivery. It is doubtful whether the thyroid gland becomes larger during lactation, but in the climacteric period it undergoes atrophy. Goitre and phthisis seem to be incompatible, and phthisis is but rarely observed in the subjects of hypertrophied thyroid gland. Dr. Fischer then referred to the numerous theories as to the etiology of goitre. Morgagni supposed that there was a communication between the thyroid gland and the larynx, and he believed that the trachea is moistened by this gland, and that phonation is thereby facilitated. Some authors suggested that this gland was a regulator of the brain, whereas Freund considered that it was in connexion with the genitals through the sanguineo-vascular system. In the lower animals extirpation of the thyroid gland causes atrophy of the sexual organs, which is due, according to Hofmeister, to shrivelling of the ovarian follicles. Hens with hypertrophied thyroid glands also lay larger eggs than those which have atrophied thyroids. Post-mortem examination of a girl aged eight years who was affected with myxœdema showed that both ovaries were of the size usual at two years of age and that they contained only a few follicles. The symptoms of Graves's disease depend in some degree on the condition of the patient's sexual development.

Anti-streptococcic Serum.

At the last meeting of the Vienna Medical Society Professor Chrobak described three cases in which anti-streptococcic serum had been injected. In the first case, which was one of erysipelas in a lying-in woman, recovery occurred after three days. The second case was that of a woman who showed symptoms of sepsis after an operation for myoma; in two days 30 c.c. of serum were injected, after which her condition improved. In the third case, that of a woman suffering from puerperal fever, 25 c.c. of serum were injected in the course of three days; the fever and rigors continued until after the administration of the last injection, but on the next day the temperature rapidly decreased. Professor Chrobak has not formed a definite opinion as to the value of the injections, but believes them to be harmless.

Death of Professor Teichmann.

The medical school of Cracow has sustained a heavy loss by the death of Professor Teichmann, who passed away at the age of seventy-two years. He was born in 1823, and studied at Dorpat, Heidelberg, and Göttingen, where he obtained his diploma in 1856. He became *privat-docent* in Anatomy and Physiology in 1859, Professor in 1861, and in 1868 he was appointed to the Ordinary Professorship at Cracow. Among his works I may mention those on the lymphatic vessels, published in 1861, and on hæmatin, published in 1853 and 1857, the latter containing the description of the so-called Teichmann's crystals, which even now are employed in Austria as a test for blood. This test, which is one of the most familiar in forensic medicine, was directed by him to be made in the following manner. The substance, which is supposed to contain blood, is to be heated with one drop of glacial acetic acid and a little common salt, and if blood be present rhombic crystals of hæmin (chlor-hæmatin) will be seen under the microscope. Professor Teichmann was also a masterly dissector, and his anatomical preparations are valuable.

Cholera in Galicia.

During last week 15 cases of cholera and 14 deaths have been reported from the districts of Buczacz, Czortkow, Husiatyn, Kamionka, Sokal, and Trembowla, making a total of 394 cases, with 259 deaths, since the outbreak of the disease.

Dec. 15th.

RUSSIA.

(FROM OUR OWN CORRESPONDENT.)

The New Prefect of St. Petersburg.

MAJOR-GENERAL CLAYHILLS, the newly appointed *gradonatchalnik*, or Prefect, of St. Petersburg, is a Scotchman by descent, though a native of the Government of St. Petersburg. He has held for the last seven years the appointment of *Oberpolizeimeister*, or head of the police, in Warsaw, where he is said to have won golden opinions from all sorts of people. In particular, he is said to have done much to improve the sanitary condition of that city, a task which, according to a leading Russian journal, "was one requiring great labour, and, in a town containing a numerous Jewish population, one of great difficulty; but, thanks to the energy of General Clayhills, the town has become notably cleaner, and the Jewish streets are almost unrecognisable." The same authority continues: "In his care for the public health he paid special attention to the purity of articles of food exposed for sale, and energetically put down adulteration of such articles. Thanks to the improved sanitary condition of the town, the mortality and sickness rates have both diminished, and cholera, which has visited Warsaw for some years running, has never spread widely. General Clayhills also dealt successfully with an epidemic of small-pox which occurred some time ago in Warsaw." These are good credentials for the new occupant of a post such as that of Prefect of the Russian capital—a post which carries with it extensive powers and responsibilities as regards sanitation and public health.

An Outbreak of Ergotism.

An epidemic of ergotism has appeared in the government of Perm, in the north-east of Russia. In some districts an average of 17 per cent. of the rye grains are found to be infected with the claviceps fungus. It has been found most difficult to separate satisfactorily the diseased from the healthy grain; but even a greater difficulty has been that of persuading the peasants that the diseased grain and the symptoms of ergotism stand in the relation of cause and effect. Ergotism is popularly called in Russia "*zlaia kortcha*," literally "malignant spasms," probably an indication that the nervous rather than the gangrenous form of the disease is the more common.

The New Medical Faculty in Odessa.

The Ministry of Education has laid before the Imperial Council a proposal to assign next year a sum of 400,000 roubles (about £43,000) to provide a building for the new medical faculty in the Novorossüsk, or New Russian, university in Odessa. The Odessa town council has also offered to raise its grant to the new faculty from 250,000 to 500,000 roubles—that is to say, from about £27,000 to £54,000.

The Cholera Epidemic.

Cholera still lingers in St. Petersburg. Between Dec. 2nd and 15th there were 176 cases of cholera and choleriform diarrhœa, of which 86 proved fatal. In the government of Volhynia, between Nov. 19th and 25th, there occurred 74 cases with forty deaths.

Dec. 16th (Dec. 28th).

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Cholera.

THE infected districts of Lake Menzaleh and the canal running to it from Mansourah are now all free from cholera, and, with the sole exception of Zagazig Town, the disease is now confined to Damietta and the neighbouring district on the Nile. It is interesting to note that directly it struck the Nile at a village called Mitkouli it travelled down stream on the right bank. No villages up stream, and practically none on the left bank of the Nile, have yet been attacked. During the past week there have been only 28 new cases admitted, and the number of deaths has fallen to 16 in hospital and 14 outside. The new cases are, therefore, less numerous and less fatal than in any preceding week. Nothing has occurred in Cairo or among the natives who were temporarily deported to Abbassiyeh from the one infected house. The only spot where cholera seems to be in the least active is at a village in the Gharbiyeh province, nearly opposite Damietta.

The Scavenging of Cairo Streets.

For many years previous to the English occupation of Egypt the Tanzim Department of the Public Works Ministry was responsible, among other things, for the making and repairing of roads, and for the watering, sweeping, and general cleaning of them. The Tanzim, consisting exclusively of French engineers, was purposely not dealt with by those Anglo-Indian irrigationists who came to Egypt in 1883 in order to control the Nile flood and distribute water all over the country for agricultural purposes; however, a few years later the Sanitary Department obtained leave to take over the work of sweeping and watering the streets because of the general inefficiency, and it was soon found that the new chief, an English chemist, carried out the work much more satisfactorily than the trained French engineers. In 1892 Mr. Hooker was called from this work to create a salt department for the Government, and the scavenging was allowed to lapse into the hands of the Tanzim once more. In September, 1894, an English chief was again appointed, under the Public Works Ministry, with satisfactory results. The French engineers still make and repair the roads, while the Englishman and a staff of natives water and scavenge. A rather larger area of Cairo is now being dealt with, and yet £2000 a year has already been saved. In July, 1894, no less than 130,000 tons of water were said to have been used for the streets, whereas in July, 1895, 70,000 tons were employed, and official complaints were made about the unnecessary flooding of the streets. Seven spots outside the town have been chosen for shooting rubbish, and steps are being taken to find farmers who will remove the refuse of the town for their land in properly constructed trains or boats.

Enteric Fever.

Several letters and telegrams have been received here from England during the last week or two, asking if there is more enteric fever in Cairo hotels than usual just now. In consequence of this rumour, which is not now spread for the first time, patients hesitate to come to Egypt, and some London physicians are very naturally diffident about advising them to do so. It may be well, therefore, to state, on the authority of the Sanitary Department, who receive notification of infectious diseases, that there has been no case of enteric fever in the Cairo hotels since February, 1895, when a young English lady is thought to have contracted the disease from the insanitary condition of the Opera House, which has now been overhauled by the sanitary authorities. Between the end of 1894 and February, 1895, there were in addition three enteric cases among the English and American visitors, two coming from Italy, and the third being of doubtful origin.

Cairo, Dec. 26th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Statistics of Mortality from Alcohol.

THE estimated mortality due to the effects of alcohol in this country is about 100,000 annually. Dr. Formad found at the necropsies of the Philadelphia Hospital that among 250 chronic alcoholists nearly 90 per cent. had fatty degeneration of the liver, 60 per cent. had congestion or a dropsical state of the brain, the same number an inflamed or degenerated stomach, while not quite 1 per cent. had normal kidneys. In order to be convinced of the cause of pauperism in the country we have only to examine the statistics of the liquor traffic in the United States. "According to the report of Mr. Mills, the Internal Revenue Commissioner, for the year 1892, the patrons of the saloons paid 609,000,000 dols. for whisky and 617,258,460 dols. for beer, a total of 1,226,259,460 dols., the interest of which for one minute at 6 per cent. per annum is 8515 dols. 68 cents."

Alleged Miraculous Cures.

A tramp named Schlatter, but professing to be Christ, has recently created great excitement among people suffering from nervous diseases in the city of Denver, Colorado. Three of the physicians of that city say that they know of no cures which the alleged healer effected. Another, Dr. C. J. Scott, says that so far as he knew there were no cures of any actual disease. A number of his patients who had diseases of the eyes and ears were "blessed" by Schlatter, but without any apparent result. Dr. Scott, however, recalls one of his own cases, that of a woman who was losing her

mind. "She was extremely nervous, morose, and could not sleep," but after being "blessed" she recovered entirely and slept well, becoming quite rational. He admits that Schlatter did for her what he could not do, and adds: "The majority of humanity wants something or someone to lean upon. Schlatter's strong mind furnished that something, and many were greatly benefited in mind. He did good, and I am glad he came." The most important letter was from the President of the State Medical Society. He says he knows of several cures for which he is willing to give Schlatter credit. One is that of an aged woman who could not sleep and could get no relief from her physician. After she saw Schlatter she slept well, and has slept well ever since. All the cases of cures were cases of nervousness, and it is his opinion that Schlatter helped about 1 per cent. of all those who came to him. That would be, as he estimates it, fifteen to twenty daily. In his opinion the tramp did no harm, but considerable good, in helping a class of cases that the physicians cannot help.

Bacteriological Specimens in the Mails.

At a recent meeting of the American Public Health Association the following preamble and resolution were offered: "Whereas specimens suitable for bacteriological examination can, when enclosed in proper packages, be transported in the mails without endangering the health of persons who may handle them, and without risk of contaminating other mail matter, and whereas bacteriological examination in cases of tuberculosis and certain other infectious diseases constitutes an invaluable defence against the spread of the pestilential affections by providing an exact method for early and accurate diagnosis, therefore it was resolved that the American Public Health Association respectfully requests the Postmaster-General to so modify the order now in force that specimens of diseased tissues, when properly enclosed in approved mailing packages, may be admitted to the mails for transmission to State and municipal laboratories."

Sanitation of Railway Cars.

Dr. Orvananos of Mexico describes the opposite ideas which prevail in the United States and Mexico with reference to car ventilation, due to the different climatic conditions. In Mexico, where the railways are generally traversing high grounds, the ordinary method of opening a few windows keeps the car comfortable; while he had noticed that in America the travellers generally wished the ventilators opened and the windows closed, the reverse was the case in Mexico. He recommends the prohibition, under severe penalties, of expectorating in any part of the cars except in the cuspidors, of which a sufficient number should be provided, and which should contain a solution of bichloride of mercury of 1 in 1000.

Condensed Food as an Army Ration.

The following experiment was recently made to determine the value of a condensed ration for soldiers. A company of the Seventh Infantry at Fort Logan, near Denver, was detailed and furnished with condensed rations consisting of coffee, soup, bread, and bacon. The coffee and soup were in small tablets, which, when placed in boiling water, were ready for consumption in two minutes. The bread was in small cakes, the weight and hardness of a brick, but when moistened swelled out like a sponge. The bacon was compressed and needed only to be warmed in a frying-pan. The soldiers started out with ten days' rations, but the campaign was brought to an abrupt end after four days of fifteen-mile marches. The food not only did not satisfy the hunger or give strength, but seemed to irritate the stomach. After the first meal two of the enlisted men had to be placed under the surgeon's care. At the end of the second day thirty of the seventy men in the company were ill, and on the fourth day the whole command went into camp, and couriers were sent to town for hard-tack and ordinary coffee and bacon. Some of the soldiers were seriously ill with a stomach complaint and were confined to the hospital for several days.

Dec. 24th.

CANADA.

(FROM OUR OWN CORRESPONDENT.)

"Christian Scientists"?

AT a coroner's inquest on a child aged six years, who had been under the treatment of a "Christian scientist," it appeared that the child had been ill for ten days and had received "mental treatment" during that time. This consisted in the "scientist" sitting near the patient with her eyes closed and silently repeating something to herself; at times the treatment was carried on by the "scientist" when some distance from the patient, then the operator was said "to take him up in thought." No medicine is used. The evidence of the medical men who performed the necropsy was to the effect that the patient died from diphtheria, and the jury brought in a verdict of "manslaughter" against Mrs. Beers, the scientist.

Life Insurance Frauds.

We seldom have to chronicle the fact that a member of the medical profession has become a party to the securing of a life insurance upon a risk which he knew to be non-insurable. A charge of fraud has, however, been preferred against the husband of a woman recently deceased, and it appeared from the medical man's own evidence that he agreed to pass the applicant for seven thousand dollars ($7000) on condition that the husband paid him one thousand dollars when the same became a claim. The answers were filled in by the practitioner who was aware that the applicant was chronically phthisical, and the magistrate committed the husband for trial.

Trinity University.

The Rev. Mr. Welch, the newly elected provost of the college, was installed as Vice-Chancellor with the usual interesting ceremony at the Convocation held on Nov. 13th. The new provost enters upon his duties with the highest recommendations from the "old land." The annual dinner of the medical students was held on Nov. 28th and was attended with more than usual interest. The chief speakers were Dr. Montague, M.P., Sir C. H. Tupper, and the Lieutenant-Governor of the province.

Visit of the British Association in 1897.

The local committee, composed of representatives of the various scientific and literary societies, the corporation, and colleges, reported that aid had been promised to the extent of 22,500 dols., of which the Dominion Government contribute 10,000 dols., the Provincial Government 7500 dols., and the corporation of the city of Toronto 5000 dols.

St. John Ambulance Association Centre.

His Honour, the Lieutenant-Governor, presided at a meeting held at the Military Institute on Nov. 25th to consider the formation of a branch of the above-mentioned association to comprise the province of Ontario, local centres to be formed as opportunity may arise. The work is being promoted by Dr. G. S. Ryerson, M.L.A., Deputy Surgeon-General. Your correspondent some years ago presented the claims of the Association to the Chief of Police of the Toronto force, with the result that many of the badges of the Association are to be seen on the arms of the men and officers.

Death under Chloroform.

"Charles James Fox" died a few days ago at Gravenhurst from an overdose of chloroform. I believe he was at one time a prominent figure in the dental profession in England. He came to this country some fifteen years ago and settled in the southern part of this province.

Toronto, Dec 24th.

Obituary.

GEORGE HUGH KIDD, M.D. EDIN., F.R.C.S. IREL., &c.

A GREAT man, and one universally respected, has fallen out of the ranks of the profession. Dr. Kidd died on Dec. 26th, 1895, at his residence, 58, Merrion-square, Dublin, at the age of seventy-one. It was known for some time past that his health was such as to give his many friends occasion for anxiety, and the news came to them with more grief than surprise. Dr. Kidd was the son of parents of Scotch extraction. He was born in Armagh. He graduated in the University of Edinburgh in 1845, taking a gold medal, of which it is recorded there were in that year four, one more than usual, Dr. Kidd being called first for the honour. His thesis on that occasion was on Vaccination, its protective power, and the proofs of the necessity of revaccination, showing that at that early age he was alive to the tendency of the virtue of the first vaccination to fail.

It would have been well if that tendency had been more seriously recognised and insisted on by medical men. Much of the misunderstanding on the subject which has given some people occasion to denounce a discovery to which many of them owe their lives would thus have been saved. At a very early age, about twenty-one, he was appointed Demonstrator of Anatomy, and afterwards Lecturer on Anatomy and Physiology, in the Park-street School of Medicine, Dublin, and in 1849 he joined the Peter-street School as a Lecturer on Anatomy, which office he held for nearly ten years. On relinquishing this he entered on private practice. Dr. Kidd's reputation is chiefly in connexion with obstetrics and gynæcology. In this department of work in Dublin he was, in his day, *facile princeps*. He had a large consulting and private practice. In 1876 he was appointed Master of the Coombe Lying-in Hospital, in which his obstetric genius and judgment found full field for their exercise. He held this office for seven years with the greatest distinction and with much advantage to the reputation of the hospital. Other hospitals elected him to office, and the medical and obstetric world heaped office and honours on him. He was elected Fellow of the Royal College of Surgeons in Ireland in 1844, a Member of the Council in 1872, and President in 1876, the same year in which he was elected Master of the Coombe Lying-in Hospital. He was at various times President of the Royal Academy of Medicine, Ireland, of the Dublin Obstetrical Society, and Dublin Pathological Society. The Obstetrical Societies of London and Edinburgh elected him an Honorary Fellow. The Gynæcological Societies of Boston and Berlin elected him a corresponding member. He was consulting obstetric surgeon to the Richmond and Mercer's Hospitals, &c.

Dr. Kidd does not appear to have written much, but his professional judgment, his large experience, and his strong common sense were universally recognised. When the Direct Representation of the profession in the General Medical Council was conceded by the Act of 1886 it was remarkable that the practitioners of Ireland elected him for their representative by a majority of nearly 300 over his next competitor, Dr. Jacob. Increasing deafness impaired of late years his influence in the Council, but his judgment was greatly respected on all questions of medical education.

Dr. Kidd was not made of the stuff which permitted him to suppress his political opinions, even in stormy and unpopular days; but he was so transparently honest and strong in his convictions that those who differed from him did not the less respect him. He leaves a widow and young children to feel acutely their great loss. They will have the consolation of knowing that they do not grieve alone, but have the sympathy of Irishmen of all parties, of his colleagues in Ireland and in the General Medical Council, of the university of which he was so creditable a graduate, and of the profession of which he was an ornament.

JAMES ROUSE, F.R.C.S. ENG.

CONSULTING SURGEON TO ST. GEORGE'S HOSPITAL.

THE death of Mr. James Rouse, which occurred on Tuesday, Dec. 24th, 1895, at his house in Wilton-street, London, S.W., can hardly have come as a surprise to his numerous friends as his health had for several years been very precarious, but it has none the less been a source of great grief to them. In particular has this feeling been manifested by his numerous old pupils, for Mr. Rouse was for generations at St. George's Hospital the students' friend. He knew the men by sight. He never forgot their names, and he was aware of much of their private circumstances, and was ready to be their friend in times of trouble. Mr. Rouse received his medical education at St. George's Hospital, and originally intended to go into general practice. A very genuine love of surgery, however, determined him to alter his plans, take the Fellowship of the Royal College of Surgeons of England, and compete for a position on the staff of his hospital. This he obtained, and, in addition to being surgeon to St. George's Hospital, he was surgeon to the Royal Westminster Ophthalmic Hospital, ophthalmic surgeon to the Eastern Counties Asylum for Idiots, and to the School for the Indigent Blind. Mr. Rouse was a careful and successful operator and a good clinical lecturer. Clear in argument, simple in diction, and familiar in manner, his homely, jocose little discourses in the theatre or at the bedside remained in the memory of his listeners when more elaborate pathological disquisitions and higher flights of rhetorical fancy had slipped away. He was not a great surgeon or an ambitious one; he was not an initiator of any methods of treatment or theories in etiology; but his was a sound, practical and reliable opinion on surgical matters, and he was a safe operator. He filled the public positions that he occupied adequately, and for many years had a large private practice. His pretty little house in Wilton-street contained many beautiful objects of art, pictures, coins, jewels, and medallions, for which things he had the genuine feeling of an artist, as all know who have had the pleasure of being discoursed to by him upon them.

We conclude as we began by saying that in James Rouse many generations of St. George's Hospital have lost a true friend, and one whose memory they will ever keep green.

CHARLES BARTHOLOMEW MOODY, M.R.C.S. ENG., L.S.A., J.P.

MR. MOODY'S death, although deeply lamented by many in Grimsby where he had been in practice for so many years, was not unexpected by his friends, as his health had suffered greatly during the last eighteen months. He was born in Grimsby in 1815 and attended medical classes at the Hull School of Medicine and at University College, London. In 1839 he received the qualifications of M.R.C.S. Eng. and L.S.A., soon afterwards commencing practice in his native town, where he, in course of time, took a prominent part in political and municipal life. He became a town councillor in 1850 and was elected mayor in 1855 and 1856. In addition to having been borough coroner from 1891 to March, 1895, and senior surgeon to the Grimsby and District Hospital, he was at the time of his death, which took place on Dec. 19th, the county coroner for the Caistor Division of Lincolnshire, and the Senior Justice of Peace for the borough of Grimsby.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent medical men are announced:—Dr. Terrillon, *professeur-agrégé*, of Paris.—Dr. Alex. Wilmart, chief of anatomical studies at the Hôpital St. Jean, Brussels.—Dr. Sickenberger, Professor of Chemistry and Pharmacology in the Medical School of Cairo.

Medical News.

UNIVERSITY OF LONDON.—The following candidates passed the B.S. Examination recently:—

EXAMINATION FOR HONOURS—SURGERY.

FIRST CLASS.

Turner, William (Scholarship and Gold Medal), King's College.
Russell, Alfred Ernest (Gold Medal), St. Thomas's Hospital.
†Shaw, Harold Batty, University College.
Hull, Charlotte Elizabeth, Royal Free Hospital.
Hunt, George Bertram, University College.
Sloane, John Stretton, B.Sc., St. Bartholomew's Hospital.
Pugh, William Thomas Gordon, Middlesex Hospital.
Barnard, Harold Leslie, London Hospital.

SECOND CLASS.

Thomas, Thomas Morrell, Guy's Hospital.
Berry, Frances May D., M.D., London School of Medicine and Royal Free Hospital.
Chaning-Pearce, David Arnold, Guy's Hospital.

† Obtained the number of marks qualifying for a gold medal.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed in the under-mentioned subjects:—

Surgery.—S. B. Blomfield, Westminster Hospital; E. C. Bond, Royal Free Hospital; A. P. Coker, Middlesex Hospital; F. C. Langford, Charing-cross Hospital; A. C. McLean, King's College Hospital; J. G. Owen, Charing-cross Hospital; C. J. Palmer, Birmingham and Liverpool; F. E. McGill Rimer and E. T. V. von Himpe, Royal Free Hospital; S. J. Wareham, Charing-cross Hospital.

Medicine, Forensic Medicine, and Midwifery.—T. Jones, Manchester; A. T. Morgan, Bristol; A. C. Thornton, St. Thomas's Hospital.

Medicine and Forensic Medicine.—P. R. Wallis, University College.

Medicine.—R. Goulden, Manchester; G. G. B. Hein, St. Thomas's Hospital; W. A. Montgomery, St. Thomas's Hospital; J. H. R. Pigeon, Bristol.

Forensic Medicine and Midwifery.—E. R. Bowen, Brooklyn and Bristol.

Forensic Medicine.—H. Clapham, Sheffield; J. Hepple, Leeds.

Midwifery.—C. C., Preston, Manchester.

To Messrs. Blomfield, Coker, Hein, Hepple, Langford, Montgomery, Owen, Palmer, Pigeon, Preston, Wareham, and Miss von Himpe was granted the diploma of the society entitling them to practise medicine, surgery, and midwifery.

ROYAL COLLEGE OF SURGEONS OF ENGLAND: MEETING OF FELLOWS.—A meeting of Fellows was held on the 2nd inst., when eighty-three Fellows were present, the President, Mr. Christopher Heath, being in the chair. A resolution, moved by Mr. Herbert W. Page and seconded by Mr. Gant, was carried by a large majority, to the effect "that it is desirable to give to the Members of the College direct representation upon the Council." Mr. Clement Lucas moved, and Mr. Norton seconded, a resolution in favour of the admission of women to the diplomas of the College. The resolution was carried, 45 Fellows voting in its favour and 10 voting against it.

ON the 21st of this month the *Guardian* completes its fiftieth year. With the paper of the following day—Wednesday, Jan. 22nd—will be published a special supplement containing a review of the origin and history of the paper. The story of the rise and progress of a successful journal always makes good reading, and to the theologically minded a comparison of the attitude of the Church in 1896 with its attitude in 1846 towards many important social questions will be deeply interesting. A *résumé* of the work of the *Guardian* during half a century will enable us to draw such comparisons.

BRIGHTON POOR-LAW LUNATICS.—In the six months between June 21st last and Dec. 5th no less than 43 patients, 24 males and 19 females, were admitted into the local asylum at the charge of the parish of Brighton. Since he former date 7 males and 15 females (22 patients) have been discharged as cured, and 14 have died (8 males and 6 females). Two patients have been transferred to other unions, and there is one patient in the Hanwell establishment. There has been an addition of 6 patients on the half-year, the present figures being: males, 147; females, 191; total, 338—as against 136, 196, and 332 respectively at the date of the last report.

FOREIGN UNIVERSITY INTELLIGENCE.—*Amsterdam:* Dr. M. Straub has been promoted to the Ordinary Professorship of Ophthalmology.—*Breslau:* Dr. K. Hürthle has been promoted to an Extraordinary Professorship of Physiology.—*Heidelberg:* Dr. G. Aschaffenburg has been recognised as *privat-docent* in Psychiatrics.—*Naples:* Dr. G. Corrado of Cagliari has been appointed Extraordinary Professor of Forensic Medicine. Dr. P. de Michele has been recognised as *privat-docent* in General Pathology; Dr. V. Salvati and Dr. A. Radice as *privat-docenten* in Surgical Pathology; Dr. F. de Grazia as *privat-docent* in Medical Pathology; and Dr. G. Spinelli as *privat-docent* in Gynæcology.—*Rome:* Dr. V. de Semo has been recognised as *privat-docent* in Medical Pathology.—*Vienna:* Dr. H. Schlesinger has been recognised as *privat-docent* in Internal Medicine, and Dr. A. Elschnigg of Gratz as *privat-docent* in Ophthalmology.—*St. Petersburg* (*Military Medical Academy*).—Dr. T. Pavloff has been recognised as *privat-docent* in Dermatology.

PRESENTATIONS TO MEDICAL MEN.—Mr. H. E. Hoffmeister, M.B., B.C. Camb., L.R.C.P Lond., M.R.C.S., house surgeon to the Stockton Hospital, Stockton-on-Tees, was presented at the hospital, on Tuesday last, by the representatives of the workmen on the general committee of management, on the occasion of his retiring from the post of house surgeon, with an address inscribed on vellum, which testified to his skill, ability, and attention during the two and a half years that he had held the office of house surgeon to the institution.—Mr. John Latchford, M.B., L.R.C.S. Irel., has been presented with a testimonial on his retiring, after seven years' service, from the post of superintendent to the London Medical Mission.—Mr. George W. H. Tawse, M.B., C.M. Aberd., late house surgeon to the Whitehaven and West Cumberland Infirmary, Whitehaven, has been the recipient of a gold watch from members of the committee of the infirmary, the staff, patients, and friends, as a testimony of his devoted and efficient services during his two years' residence there.—Dr. T. C. Hood, on his leaving Sorell, Tasmania, was entertained at a farewell dinner by the magistrates of the district, and also presented by the ladies with a silver card case and cigar case suitably inscribed.—Mr. R. H. Perks, M.D. Brux., F.R.C.S. Eng., late superintendent of the Adelaide Hospital, South Australia, has been the recipient from the nursing staff of the institution of a camera as a mark of esteem.

LONDON POST-GRADUATE COURSE.—Dr. Buzzard has been succeeded in the office of Treasurer of this Course by Dr. J. F. Payne, 78, Wimpole-street, W., to whom all business communications should in future be made.

DIPHTHERIA IN LONDON.—The death-roll from diphtheria in London was again extremely heavy last week, exceeding the decennial average for the last week of the ten years 1885–94 by no fewer than 34 deaths. In the three preceding weeks of December the deaths had numbered 69, 63, and 62 respectively. There were 7 deaths of persons belonging to Camberwell, 6 to Chelsea, 5 each to Islington and Whitechapel, and 4 respectively to Hackney, Greenwich, and Plumstead sanitary areas. The deaths were all, with 4 exceptions, those of young persons aged between one and twenty years. The admissions to hospital last week were 93 in number, as compared with 114, 91, and 104 in earlier weeks. On Saturday last the patients remaining under treatment totalled 705. In the outer ring of the metropolis there were in addition 15 deaths registered from the disease, of which 6 were those of persons belonging to the West Ham district. Thus there were in one week 86 deaths in and around London from this malady, which seems to baffle all the efforts now put forth to curtail its extent of fatality.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAM, G. R. W., M.B., Ch.M. Edin., has been appointed an Examiner in Obstetrics at the Melbourne University, Victoria, Australia.

BALDWIN, GEORGE P., L.R.C.P., L.R.C.S. Edin., has been appointed Resident Medical Superintendent to the Auckland Hospital, New Zealand.

BELDING, D. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer by the East Dereham Urban District Council.

BUCK, L. A., M.R.C.S., has been reappointed Resident Medical Officer for the Workhouse, Bolton.

COOK, JOHN W., M.D. Aberd., M.R.C.S., has been appointed Medical Officer of Health for Walton-on-the-Naze.

COOPER, L. V., L.R.C.P., L.R.C.S. Edin., has been appointed an Honorary Medical Officer of the Hospital for Sick Children, Queensland.

DICK, JAMES A., M.D., M.S. Edin., has been appointed Vaccinator for the District of Sydney and Suburbs, New South Wales.

DUNCAN, S. V., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed *pro tem.* Resident Government Medical Officer, York, Western Australia.

FROST, J. KINGDON, M.R.C.S., L.S.A., D.P.H. Camb., has been reappointed Medical Officer of Health to the Madley District of the Dore Union, Herefordshire.

GARTH, J., L.R.C.P., L.M. Irel., has been reappointed Medical Officer of Health by the Fulwood Urban Council.

GARSTANG, T. W. H., M.R.C.S., has been appointed Medical Officer of Health by the Bucklow Rural District Council.

GILES, H. O'H., M.B., Ch.B. Adel., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Health Officer for Wyndham Shire, Victoria, Australia.

HALE, G. E., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer by the Eton Board of Guardians and Rural District Council.

HOGGAN, BERTRAM B., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Health Officer for Romsey Shire, Victoria, Australia.

HUNTER, W. L., M.D., B.Ch. Dubl., D.P.H. Camb. and Eng. Conj. Board, has been appointed an Inspector under the Food and Drugs Act for Pudsey by the County Council.

LOVEGROVE, T. H., M.R.C.S. Eng., has been appointed Principal Medical Officer and Superintendent of Vaccination, Western Australia, vice A. R. Waylen, retired.

PERROTT, C. I., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer of Health by the Kingswood Urban District Council.

PHILLIPS, G. H., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed an Official Visitor to the Hospital for the Insane at Parramatta, New South Wales, vice W. Brown, resigned.

PIRIE, R. S., L.R.C P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Assistant Medical Officer of the St. Andrew's District, and Medical Officer of Ovenstone Hospital.

RAMSEY, R., M.B., M.S. Edin., has been appointed Resident Medical Officer of the Murchison Goldfield District and Public Vaccinator of the Urban and Suburban Districts of Cue, and the Rural District of Murchison Goldfield, Western Australia.

ROBERTS, A. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Malling Rural Sanitary District, vice H. Butterfield.

ROE, ALFRED J. S., L.R.C.P., L.R.C.S. Irel., has been appointed Resident Surgeon to the Hull and Sculcoates Dispensary.

ROE, ARTHUR LEGGE, L.R.C.P., L.R.C.S. Irel., has been appointed Honorary Ophthalmic Surgeon to the Hull and Sculcoates Dispensary.

SADLER F. J., M.B., B.Ch., Oxon, has been appointed Assistant Medical Officer of Health by the Barnsley Town Council.

SHARMAN, M., M.B., C.M. Glasg., M.R.C.S., has been reappointed Medical Officer for the Harefield Sanitary District of the Uxbridge Union.

SNOWBALL, WILLIAM, M.B., Ch.B. Melb., L.R.C.S. Edin., has been appointed a Member of the Medical Board of Victoria, Australia, vice Dr. Jonasson, deceased.

SPENCER, W., M.D. Brux., L.R.C.P. Edin., M.R.C.S. Eng., has been appointed Honorary Medical Officer to the Society for the Prevention of Cruelty to Children, also Honorary Physician to the "Sydney Rescue Work Society," New South Wales.

SPICER, SCANES, M.D. Lond., M.R.C.S., has been appointed an Honorary Physician to the Royal Society of Musicians of Great Britain.

STEWART, GEORGE E., M.B., C.M. Edin., has been appointed Assistant House Surgeon to the Scarborough Hospital and Dispensary.

TAYLOR, HUGH, L.R.C.P., L.M. Edin., M.R.C.S., has been reappointed Medical Officer of Health for the Smallburgh Union.

THOMPSON, H. CAMPBELL, M.D. Lond., M.R.C.P., has been appointed Medical Registrar to the Middlesex Hospital.

WALFORD, E., M.D. Durh., M.R.C.S. Eng., D.P.H. Camb., has been reappointed Medical Officer of Health for the Cardiff Port Sanitary District.

WRIGHT, J. F., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer for the Western Bolton Sanitary District of Great Bolton Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary £150 per annum (with an allowance of £30 per annum for cab hire), and furnished rooms, fire, lights, and attendance.

CHILDREN'S HOSPITAL, Nottingham.—House Surgeon (non-resident) for six months. Salary at the rate of £100 per annum.

COUNTY ASYLUM, Prestwich, near Manchester.—Assistant Medical Officer, unmarried. Salary commences at £100 a year, increasing to £200, with apartments, board, attendance, and washing.

COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer, unmarried. Salary commences at £100 a year, with prospect of an annual rise of £25 up to £200, together with furnished apartments, board, attendance, and washing.

COUNTY ASYLUM, Upton, near Chester.—Junior Assistant Medical Officer. Salary £120 per annum, with board (no liquors), lodging, and washing.

EAST SUFFOLK AND IPSWICH HOSPITAL, Ipswich.—Honorary Ophthalmic Surgeon.

FISHERTON HOUSE ASYLUM.—Assistant Medical Officer, single. Salary £100 per annum, with board, lodging, and washing. Apply Dr. Finch, the Asylum, Salisbury.

GENERAL INFIRMARY AND DISPENSARY, Doncaster.—In-door Dispenser and Assistant. Board, lodging, and washing provided.

HASTINGS, ST. LEONARD'S, AND EAST SUSSEX HOSPITAL, Hastings.—Assistant Physician.

HOSPITAL FOR WOMEN, Soho-square, London, W.—Registrar, for twelve months. Honorarium 25 guineas.

HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistants.

METROPOLITAN ASYLUMS BOARD.—Assistant Medical Officer at the Small-pox Hospital Ships in the River Thames at Long Reach, Dartford, Kent. Unmarried. Salary £160 per annum the first year, £180 the second year, and £200 the third and subsequent years of service, with board, lodging, attendance and washing. Applications to the Clerk to the Board, Norfolk House, Norfolk-street, Strand.

PARISH OF ROUSAY AND EGILSHAY.—Resident Medical Officer. Salary £51 sterling per annum. Applications to Inspector of Poor, Rousay, Orkney.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House Surgeon for six months. Board, residence, and washing provided.

ROYAL FREE HOSPITAL, Gray's-inn-road, London.—Assistant Physician for Out-patients.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House Surgeon. Salary £100 per annum, with board and lodging.

SCOTTISH PRISON SERVICE.—Resident Medical Officer. Salary commences at £250, with a house. Applications to the Secretary of the Prison Commission for Scotland, 6, Rutland-square, Edinburgh.

SHEFFIELD CHILDREN'S HOSPITAL.—House Surgeon. Salary £70, with furnished apartments, rations, washing, fuel, light, and attendance.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, Welbeck-street, London, W.—Physician.

Births, Marriages, and Deaths.

BIRTHS.

ALLPORT.—On Dec. 24th, at Wilsham, Casewick-road, Norwood, the wife of Alfred Allport, M.R.C.S., of a daughter.

JOLLY.—On Dec. 25th, at Godstone House, Sydenham, the wife of S. Blake Jolly, M.B. Cantab., M.R.C.S., of a daughter.

KENT.—On Dec. 23rd, at 3, Minard-terrace, Partick-hill, Glasgow, the wife of R. T. Kent, M.A. Oxon., F.R.C.S., of a son.

WILKINSON.—On Dec. 26th, at Kirton, Boston, Lincolnshire, the wife of John Wilkinson, M.B., C.M. Edin., of a daughter.

MARRIAGE.

GROSS—HARKER.—On Dec. 28th, at the Parish Church, Blaxhall, Suffolk, Charles Frederick Gross, M.R.C.S., L.R.C.P., son of Arthur Spurling Gross, of Woodbridge, to Dorothy Lucy, younger daughter of the late James Cumming Harker, of Liverpool.

WILKINSON—FOSTER.—On Dec. 28th, at Christ Church, Harrogate, by the Rev. R. W. Fawkes, George Wilkinson, B.A., F.R.C.S., of Harcourt-road, Crookesmoor, Sheffield, to Alice Foster, niece of Heaton Foster, of Hornsea, East Yorkshire.

DEATHS.

CHIPPENDALE.—On Dec. 23rd, at 16, Upper Phillimore-place, Kensington, John Chippendale, Esq., F.R.C.S. Eng., in his 91st year.

HUNT.—On Dec. 27th, 1895, suddenly, at Christchurch, Hants, Bertram Hunt, M.B. Oxon., M.R.C.S., aged thirty-nine.

JACKSON.—On Dec. 29th, at 53, Wilkinson-street, Sheffield, Arthur Jackson, M.R.C.S. Eng., in his 52nd year.

JACKSON.—On Dec. 22nd, at Shepherd's Bush, London, Richard Jackson, M.R.C.S. (Eng.), L.R.C.P. (Lond.), L.S.A. (Lond.), fourth son of the late Richard Jackson, Beechwood House, Fulford-road, York.

KIDD.—On Dec. 26th, at Merrion-square, Dublin, George Hugh Kidd, M.D. Edin., Past President Royal College of Surgeons, Ireland, and Royal Irish Academy of Medicine, aged 71.

ROUSE.—On Dec. 24th, at Wilton-street, Grosvenor-place, James Rouse, F.R.C.S. Eng., late Senior Surgeon of St. George's Hospital, aged 65.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.

BOOKS, ETC., RECEIVED.

BRIGGS, WILLIAM, Wesley-buildings, Toronto.

Consumption: Its Nature, Causes, and Prevention; with an Outline of the Principles of Treatment. By Edward Playter, M.D. 1895. pp. 343.

CHURCHILL, J. & A., New Burlington-street, London, W.

The Physiology of the Carbo-hydrates: An Epicriticism. By F. W. Pavy, M.D., LL.D., F.R.S. 1895. pp. 141. Price 3s. 6d.

HODDER AND STOUGHTON, Paternoster-row, London, E.C.

A Doctor of the Old School. By Ian Maclaren. 1895. pp. 208. Price 9s.

KIMPTON, H., High Holborn, London, W.C.

A Manual of Obstetrics. By A. F. A. King, A.M., M.D. Sixth edition. 1896. pp. 533.

LEA BROTHERS AND CO., Philadelphia, U.S.A.

System of Surgery. Edited by F. S. Dennis, M.D., assisted by John S. Billings, M.D. Vol. III. Illustrated. 1895. pp. 919.

MACDOUGAL, ALEX., Mitchell-street, Glasgow.

A History of the Chronic Degenerative Diseases of the Central Nervous System. By Thos. K. Monro, M.A., M.D. 1895. pp. 82.

PENTLAND, YOUNG J., Edinburgh and London.

The Pathology and Treatment of Venereal Diseases. By Robert W. Taylor, M.D. Illustrated. 1895. pp. 1002.

PUTNAMS' SONS, Bedford-street, London, W.C.

Lectures on Appendicitis and Notes on other subjects. By R. T. Morris, A.M., M.D. Illustrated. 1895. pp. 163. Price 9s.

SAMPSON LOW, MARSTON, AND CO., Fetter-lane, Fleet-street, London, E.C.

Napoleon III. (My Recollections). By Sir William Fraser, Bart. pp. 274.

SAUNDERS, W. B., Walnut-street, Philadelphia, U.S.A.

A Manual of the Practice of Medicine. By George R. Lockwood, M.D. Illustrated. 1896. pp. 935.

SMITH, ELDER AND CO., Waterloo-place, London, S.W.

Dictionary of National Biography. Edited by Sidney Lee. Vol. XLV. Pereira—Pockrich. 1896. pp. 457.

SWAN SONNENSCHEIN AND CO., Paternoster-square, London, E.C.

Public Health in European Capitals. By Thomas M. Legge, M.A., M.D. Oxon., D.P.H. Cantab. 1896. pp. 201. Price 3s. 6d.

WHITTAKER AND CO., White Hart-street, Paternoster-square, London, E.C.

Whittaker's Windsor Peerage, Baronetage, and Knightage for 1896. pp. 736.

"Our Treasures," and How to Keep Them (The Liquor Carnis Company, Aston Clinton, Bucks; London Offices, 28A, Farringdon-street, E.C.)—Latent Gastric Ulcer; by F. H. Alderson, M.D.; reprint from the "Provincial Medical Journal," December, 1895, Leicester; Proceedings of the Incorporated Society for Psychical Research; December, 1895; Part 29, vol. xi. (Kegan Paul, Trench and Co., Charing-cross-road, London, W.C.) price 4s.—Chemists' Vest Pocket Diary and Ready Reference, 1896 (Burroughs, Wellcome, & Co., London, E.C.).—The British Gynæcological Journal; edited by L. Napier, M.D., F.R.S. Edin.; Part 43; November, 1895 (John Bale and Sons, London); price 3s. 6d.—The Thyroid Treatment of Myxœdema and Sporadic Cretinism, with Notes of Twenty-three Cases of Myxœdema and Five Cases of Sporadic Cretinism, treated by Thyroid Extract; by Byrom Bramwell, M.D., F.R.C.P. Edin.; reprint (Young J. Pentland, Edinburgh and London; 1895). Magazines for January, 1896: Chapman's Magazine, Westminster Review, Illustrated English Magazine, Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home, Pall Mall Magazine, Contemporary Review.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 2nd, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Dec. 27	30·20	N.E.	38	37	41	39	33	0·11	Raining
" 28	30·35	N.E.	35	34	49	49	33	...	Overcast
" 29	29·92	W.	49	48	52	52	35	0·17	Cloudy
" 30	29·72	S.W.	52	51	60	56	48	0·29	Raining
" 31	29·85	S.W.	52	51	59	54	51	0·06	Overcast
Jan. 1	30·18	S.	46	44	54	51	44	...	Cloudy
" 2	30·17	S.	51	50	52	51	45	0·02	Raining

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO ADVERTISERS.

THE great pressure on our advertising space this week has necessitated the holding over of several of our clients' announcements.

THE INDEX TO THE LANCET.

THE Index for the half-year ending Dec. 31st was given in last week's issue, which completed the second volume of the year 1895. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the second half of the year 1895 are now ready. Bound in cloth, gilt lettered, price 18*s*.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s*.

To be obtained on application to the Manager, accompanied by remittance.

CÆSAREAN SECTION PERFORMED BY A CURÉ.

AN ecclesiastic of Olliarques, in France, recently opened the abdomen of a pregnant woman, using an ordinary pocket-knife, in order that he might administer baptism to the infant, which, however, was dead when extracted. Probably this illegal operator believed that the mother's life had likewise ceased when he commenced; but as there seem to be some grave doubts on the point the matter has been referred to the judicial authorities.

MEDICAL OFFICERS OF HEALTH AND NOTIFYING PRACTITIONERS.

IT is inevitable that some friction should occasionally arise between medical officers of health and notifying practitioners. The difficulty in this case is occasioned not so much by a difference of diagnosis as by the procedure and by the tone of the letters and the respective parties, whom we shall designate as A, B, C—letters which imply the practitioners concerned in the order in which they were brought into the case. We shall answer briefly the questions put to us by A.:—(1) The medical officer (B) was not justified in saying that A had given *no* instructions as to isolation and disinfection; (2) the medical officer is not to be blamed for knowing the very wholesome rule of the infirmary—that the house surgeon shall not attend a case of scarlet fever; and (3) the medical officer goes far to explain, and in explaining to excuse, his action in advising the parent to call in another medical man. He erred in not communicating with A, who had notified the case, and conferring in a friendly way on the course to be pursued. The general result of our view of the case is that the letters on both sides are unfortunate in tone and language. A would have done well, instead of writing, to have seen the medical officer of health, and B would have saved all the discord by a personal conference with A when he found reason for dissenting from his diagnosis. We should recommend both parties to reconsider the whole case in conversation and come to a friendly understanding. If B's statement is correct that C was the usual medical attendant it was natural that he should be called in, and we see no object in complicating the controversy by blaming him.

Dr. W. Woodward.—There is a disposition to throw such appointments open to all the members of the profession that care to be appointed. On the supposition that care is taken to exclude unfit persons—in other words, to secure that the persons benefited are well selected—it seems to us that this is the principle most likely to secure the harmony and goodwill of the profession. Where an institution has been worked on a principle of restriction, and is working well, any change should be made tentatively and gradually.

A QUESTION OF ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—As there have been several letters lately in THE LANCET concerning the good feeling between consultants and general practitioners, I should much like your opinion on the following points. A gentleman residing in a suburb of a large town for several years does only consulting work in town and is called in by his medical neighbours in consultation. He starts in the said suburb as a general practitioner without giving notice to his medical neighbours. He holds a hospital appointment in the town which occupies much of his time. In case of any of his patients requiring immediate medical aid and calling the nearest medical man in, ought the latter to observe the ordinary etiquette of the profession and act only as the absentee's substitute?

I am, Sirs, yours truly,

Dec. 30th, 1895. DUBITANS.

*** The inference we are to draw is that the former consultant under that guise got introductions to the patients of his brethren and has later proceeded to attend them as their family practitioner. This can be the only offence he has committed, and it is not clear from our correspondent's letter that he is being actually accused of it. There can be no doubt that such a course, if deliberately planned, is unprofessional and mean; and, without counselling tactics of retaliation, we still feel that the offender has placed himself in a position where he cannot complain if an attitude of strict medical etiquette is not maintained towards him by others. But is "Dubitans" certain that the object of his letter may not have a very satisfactory explanation?—ED. L.

PILOCARPIN OINTMENT IN NEPHRITIS.

To the Editors of THE LANCET.

SIRS,—IN THE LANCET of July 6th, 1895, p. 47, there is mention made of experiments with pilocarpin used as an ointment in cases of nephritis. The ointment is to be rubbed into the skin. Will any of your readers, or perhaps the originator of the treatment himself, be good enough to tell me if it is likely to prove useful in a case of two years' standing? The quantity of albumin is about one-ninth, and the patient feels perfectly well. Does the treatment necessitate staying in bed, or does it interfere in any way with the daily routine?

I am, Sirs, yours truly,

Eastbourne, Dec. 31st, 1895. O. H.

SURGEONS AND COÖPERATION WITH HOMŒOPATHS.

A correspondent ("Hon. Secretary") asks, "If sent for by a homœopath to an urgent surgical case, what would be the proper attitude for the surgeon to adopt towards him and his patient?" The question is an old one, and the answer is not difficult. A surgeon would be justified on the score of humanity in giving his immediate surgical assistance in such a case, but he should not agree to continue in attendance with a practitioner who has a peculiar and unrecognised set of medical principles, which, in the surgeon's opinion, might compromise the interests of the patient.

JAMES BARRY, M.D., INSPECTOR-GENERAL OF HOSPITALS, 1862.

THE portrait here given of the notorious lady who figured as a medical officer in the army from 1813 till 1865 is reproduced from the frontispiece by Bertram Loud to Colonel Rogers's reproduced novel, "A Modern Sphinx." In an introductory chapter Colonel Rogers explains the reappearance of his work and quotes portions of the lengthy correspondence carried on in THE LANCET for several weeks lately concerning the personality of this most remarkable physician. The book has been brought out in a costly manner, and we commend its perusal

to all whose interest has been aroused by letters which we published. Only 200 copies are available, which, by-the-bye, are published by subscription, and application for copies must be made direct to the author at the Savage Club, Adelphi, W.C.

One of the Medical Staff.—We are of opinion that E. should be formally elected before acting in the cottage hospital. We are writing in ignorance of the rules of this particular hospital; but if it is administered, like most other hospitals, by a duly elected staff, our contention is obviously sound.

IS GASTRO-INTESTINAL ASEPTICITY IMPOSSIBLE?

To the Editors of THE LANCET.

SIRS,—French authorities have pronounced intestinal asepticity as impossible by all agents known to them. But they have not tried the biniodide of mercury. Dr. Clement Luff, using my prescription for this purpose, cured cent. per cent. of cases of infantile diarrhœa caused by abnormal ferments in the tract in 1889, and reported his cases before the Harveian Society in November. This was reported in the *British Medical Journal* of Nov. 16th that year. Let anyone give one-twelfth of a grain of Messrs. Burroughs and Wellcome's tabloids of "iodic hydrarg." three times a day, and in two or three days the intestinal contents will be aseptic.

I am, Sirs, yours faithfully,

C. R. ILLINGWORTH, M.D., D.P.H.

Ritherdon-road, S.W., Dec. 15th, 1895.

A PLEA FOR THE HOUSEHOLDER.

To the Editors of THE LANCET.

SIRS,—I have for many years past had experience in the principles which should guide in determining the best method of rendering a house sanitary, and, as a late member of the Sanitary Committee of Fulham, I have had full opportunity of becoming acquainted with the manner in which the provisions of the Public Health Acts are carried out. I may say that this experience would not lead me into the error which brought upon the correspondent the well-deserved rebuke of the medical officer of health for Islington. But, as a layman, I should like the interests of both owners and occupiers to be taken into consideration a little more if possible. Let me illustrate my meaning by a quotation from the recently published report of the medical officer of health for this district. On page 24 it is stated: "In a great number of instances, when inquiries were being made as to the probable source of infection, complaints were made of the smells arising from an adjacent open manhole or ventilator; *and there certainly was a larger proportion of cases in the houses near the manholes than elsewhere.* [The italics are mine.] Thus of the 231 cases 96 occurred in houses situated within ten yards of a sewer ventilator, and 64 in houses at a distance of from ten to twenty, and as the distance between these ventilators averages about eighty yards there were more than twice as many cases in houses within twenty yards as there were in an equal number of houses more than twenty yards from a ventilator. It is quite possible that the offensive emanations from these ventilators to which the occupants of adjacent houses are constantly exposed may have such an injurious effect on their general health as to predispose to the disease." Too much stress cannot be laid on the concluding paragraph taken in connexion with the return given on page 22 of the same report, in which it is shown that during the twelve months no fewer than 342 cases of diphtheria and membranous croup were notified. Of this number 108 are reported as having died. Thus there is a death-rate from this cause of above 1·0 per 1000, as compared with 0·6 for the whole of London, with only two exceptions, but the mortality was 31·6 per cent. of the number of cases. I am credibly informed that there is a certain form of tonsillitis now prevalent, in its early stage very much like diphtheria in its symptoms, but in such cases the patient recovers in from three days to a week. It is brought about perhaps by some condition of the air, or through the sewer openings in the streets. Now if these latter cases are notified as diphtheria to avoid the risk of penalty for non-compliance with the Act the machinery of the medical officer of health's office is set in operation and, once started, cannot be stopped. The notification is taken as justification, and an inspector is directly instructed to make a complete survey of the drains, apparatus, fittings, and water-supply. Notice of defect (if any, and there is generally something not up to date) is served, with an intimation of the penalties for not proceeding at once and completing within seven days. Take a house wherein this has been the only case of illness for years (and there are many such), and say that no defect can be found in the drain; but the apparatus is, although serviceable, not of the present approved type. Directly the owner commences to comply with his notice by the substitution of a more modern style the new regulations of the London County Council apply, and in every instance a reconstruction of the sanitary fittings is imperative. If this appears to bear harshly, how much more so where the disease has not been contracted in the house, but through the sewer ventilators, or where the medical attendant's diagnosis is that of diphtheria instead of tonsillitis, and the patient recovers within the period stipulated for completion under the sanitary notice? It is, in many cases, the unnecessary expenses which fall upon the owner that should be avoided, where possible, and my object is to ask whether it would be *infra dig.* for the medical officer of health to be called in to agree with the attendant medical man's diagnosis of all cases of disease engendered by foul smells before being notified?

I am, Sirs, yours obediently,

Charleville-road, W., Dec. 26th, 1895. C. STUART-BARKER.

*** We have pleasure in printing Mr. Stuart-Barker's letter. The medical officer of health cannot be placed in a position to sit in judgment upon the diagnosis of the general practitioner. Some more fitting way than this out of a practical difficulty must be found, but we are not unaware that excessive trouble is given and excessive expense imposed upon the householder occasionally.—ED. L.

"PROSECUTION FOR SELLING DRUGS OVER THE PRESCRIBED STRENGTH."

WE regret that we were not aware, when commenting upon the cases of prosecution at Birmingham for selling drugs over the prescribed strength in our issue of Dec. 21st, 1895, that the offenders were not qualified chemists. The report which we read, and upon which we based our remarks, certainly did not convey this impression. We gladly make this correction; and, far from intending any injustice to qualified druggists and chemists—as both the *Chemist and Druggist* and the *British and Colonial Druggist* not unreasonably suggest—we thought it proper to add that "the record of offences of this sort on the part of *respectable* chemists and druggists is a very satisfactory one; theirs is a business which requires constant care, and no one better than themselves know it and realise it."

Pro Medico.—The answer entirely depends on the contract with the nurse, which we have not before us. The length of notice seems sufficient, and it would scarcely seem reasonable to deny the managers the right of dismissal if they conscientiously think a nurse unsuited for the place. Mere professional efficiency is not the only qualification of a nurse for working smoothly with those who employ her. The caprice or injustice would have to be very obvious to make a ground of action.

Medicus.—The question is essentially a legal one, but our correspondent seems to have a most valid case and ground of complaint. We are not aware of any privilege possessed by the chairman of a board of guardians to utter in the presence of reporters unfounded remarks calculated to injure an absent medical officer. The medical officer should demand an apology and withdrawal.

THE PATHOGENESIS OF CANCER: A CORRECTION.

To the Editors of THE LANCET.

SIRS,—In your abstract (THE LANCET, Dec. 21st, 1895) of my communication on this subject to the Manchester Medical Society there occurs a small, but important, misprint, which I shall feel obliged if you will rectify. I am represented by the "printer's devil" as having said that "the process by which cancers and other neoplasms arose might be regarded as a kind of abnormal generation." The error is in the last word of this sentence, which should be *gemmation*, not "generation." It is strange to see how unkindly the "printer's devil" takes to unfamiliar words and despitefully uses them.

I am, Sirs, yours truly,

Preston, Dec. 21st, 1895. W. ROGER WILLIAMS.

JOHN ABERNETHY HICKS.

To the Editors of THE LANCET.

SIRS,—On page 1657 of THE LANCET of Dec. 28th, 1895, I notice that, in alluding to the death of my father, John Abernethy Hicks, you mention that his family had practised medicine at Emsworth, Hants, and neighbourhood, for 150 years. This is perfectly correct, but I wish to take the liberty of drawing your attention to the mistake in spelling the name as "Wicks," whereas it ought to be "Hicks." Apologising for troubling you,—

I am, Sirs, yours faithfully,

JNO. ABERNETHY HICKS, M.R.C.S., L.R.C.P.

Bexhill-on-Sea, Dec. 29th, 1894.

THE CORONER AND THE INFLUENZA.

To the Editors of THE LANCET.

SIRS,—By this post I send you copies of the *East Anglian Daily Times* containing an account of proceedings of an inquest held by the borough coroner of Ipswich regarding an outbreak of diphtheria in that town. It seemed to me so irregular that a coroner should hold such an inquiry that I had the curiosity to attend the adjourned inquest, and, from remarks he then made, I got the impression that the coroner was not very sure of his ground. The cause of the child's death was undoubtedly diphtheria, and I believe such was certified by the medical attendant. Surely the proper person to conduct such an inquiry should have been a medical inspector of the Local Government Board?

I am, Sirs, yours faithfully,

JNO. W. COOK, M.D.,

Medical Officer of Health to the Tendring Rural

Colchester, Dec. 16th, 1895. District Council.

*** We had watched the proceedings of the inquest at Ipswich with some interest. The case is quite exceptional. The child was known to have died from diphtheria, and the only excuse for an inquest seems to have been either to review the diagnosis, which was utterly unnecessary, or to enter into an etiological investigation as to whether the disease had been brought about by faulty sanitary conditions owing to neglect of the town council. Inquiry by a coroner under either of these conditions seems to have been a very useless procedure; even if the jury had found owners of property or the sanitary authority guilty, the matter could not have been pressed further; and the mere holding of a coroner's inquest naturally prevented the proper form of inquiry, if any was needed, by the Medical Department of the Local Government Board.—Ed. L.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic 10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY.—LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—4.30 P.M. Annual General Meeting. Cases, Specimens, &c., by the President, Dr. Barclay Baron, Dr. J. W. Bond, Dr. Bronnor, Dr. Couper Cripps, Dr. William Hill, Dr. David Newman, Mr. C. A. Parker, Dr. Scanes Spicer, Dr. St. Clair Thomson, and Dr. Herbert Tilley. 8 P.M. Annual Dinner (Café Royal).

HUNTERIAN SOCIETY.—8.30 P.M. Dr. J. H. Sequeira: Chronic Pharyngeal Affections and their Relation to Diphtheria.—Dr. Fortescue Fox: Localised Rheumatoid Arthritis.—Mr. Percy Warner: Some Notes of a case of Typhlitis.

SOUTH-WEST LONDON MEDICAL SOCIETY (Windmill House, Clapham-common).—8.30 P.M. Mr. W. G. Dickinson: Professional Unionism. A Discussion will follow.

THURSDAY.—HARVEIAN SOCIETY.—Mr. Edmund Owen: Children's Spines—Healthy, Unhealthy, and Otherwise.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Mr. Fredk. Edge (Wolverhampton): Notes on a case of a Para-utero Vaginal Fibroid Tumour treated by Removal of the Appendages and Dissection out of the Growth.—Mr. Bowreman Jessett: The Difficulty of Diagnosing Early Carcinoma of the Body of the Uterus (with specimen).

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY (Great Northern Central Hospital, Holloway).—8.30 P.M. Specimens and Clinical Cases. Dr. Arthur Wilson: Case of Perforating Ulcer of the Stomach. Dr. C. E. Beevor: Case of Arsenical Neuritis. And other cases.

FRIDAY.—CLINICAL SOCIETY OF LONDON.—Dr. David Newman: Intermittent Hydro-Nephrosis and Transient Albuminuria in cases of Movable Kidney.—Dr. Lee Dickinson: Cases of Spontaneous Thrombosis of the Cerebral Veins and Sinuses in Chlorosis.—Dr. S. Ringer and Dr. A. G. Phear: A case of Addison's Disease, treated with Supra-Renal Extract (with an abstract of previously recorded cases).—Dr. Hale White: Two cases of Pneumo-Thorax in the course of Typhoid Fever, and both due to straining at stool.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

TUESDAY.—ROYAL INSTITUTION.—3 P.M. Professor John Gray McKendrick: Sound, Hearing, and Speech (experimentally illustrated). And on Thursday at the same hour.

During the week marked copies of the following newspapers have been received:—*Wellington Journal and Shrewsbury News, Shifnal, Oakengates, Ironbridge and Madeley Advertiser, Glasgow Record, Times of India, Pioneer Mail, Scotsman, Family Doctor, City Press, Sanitary Record, Macclesfield Chronicle, Carnarvon Herald, Westminster Gazette, Rochdale Observer, Morning Leader, East Anglian Daily Times, Cork Constitution, Manchester Guardian, Newcastle Chronicle, North Star, Birmingham Gazette, Sheffield Independent, Eastern Morning News, Aldershot Gazette, West Middlesex Standard, Hertfordshire Mercury, Weekly Free Press and Aberdeen Herald, Liverpool Daily Post, Builder, Bristol Mercury, Architect, Standard, Yorkshire Post. Local Government Journal, Leeds Mercury, Gazette and News (Blackpool), Blackpool Herald, Nottingham Express, Goole Times, Cornish Telegraph, Maidstone Journal, Bedford Advertiser, Local Government Chronicle, Eastbourne Gazette, Essex County Standard, Herald Standard (Melbourne), Australian Medical Gazette, Glasgow Bailie, Liverpool Courier, Hereford Times, Rangoon Times, North China Herald, West Kent Advertiser, Alnwick Gazette, The Cambrian (Swansea), The Lancashire Daily Post, Reading Mercury, Mining Journal, Morning, Surrey Advertiser*, &c., &c.

Communications, Letters, &c., have been received from—

A.—Dr. J. Althaus, Lond.; Mr. D. Ainley, Halifax; Messrs. Armour and Co., Lond.; Messrs. T. and M. Armstrong, Lond.; Messrs. E. Austin and Sons, Clifton; Alpha, Lond.

B.—Dr. D. Bower, Bedford; Dr. S. Bernhein, Paris; Mr. G. Buxey, Southampton; Mr. A. E. Barker, Lond.; Mr. H. Browne, Amesbury; Mr. G. R. Butler, Lond.; Mr. E. J. Blake, Headford, Ireland; Mr. C. Birchall, Liverpool; Messrs. Blondeau et Cie., Lond.; Messrs. Burroughs, Wellcome, & Co., Lond.; Messrs. Burgoyne, Burbidges, and Co., Lond.; Brit. Gynæcol. Soc., Lond., Hon. Sec. of; B., Tredegar.

C.—Dr. Cunningham, Lond.; Mr. W. H. B. Crockwell, Whalley Range; Mr. R. Cuffe, Woodhall Spa; Messrs. Crossley, Moir, and Co., Lond.; Messrs. Cooper and Co, Lond.; Messrs. J. and A. Churchill, Lond.; Cortland Wagon Co., Lond.; *Chemical News*, Lond.; Chester County Asylum, Clerk of.

D.—Mr. M.G. Daigleish, Newcastle-on-Tyne; Mr. E. T. Davies, Liverpool; Mr. T. H. Dickson, Lond.; Mr. E. Davies, Lond.; Messrs. W. Dawson and Sons, Lond.; Doncaster Gen. Infirmary, Hon. Sec. of; Daleth, Lond.

E.—Dr. G. A. Eustache, Patras, Greece; Messrs. Eason and Son., Dublin; East Suffolk and Ipswich Hosp., Sec. of.

F.—Mr. W. C. Finch, Salisbury; Mr. F. B. Fisher, Dorchester; Mr. H. Formby, Preston, Brighton.

G.—Dr. H. L. Gordon, Lond.; Prof. George Fleming, Combe Martin; Mr. C. F. Gerhardt, Lond.; Mr. A. J. P. Gipps, Plymouth; Mr. A. Goodman, Taunton; Gt. Yarmouth Hosp., Sec. of.

H.—Dr. G. Herschell, Lond.; Dr. W. S. Hedley, Brighton; Mr. J. Heywood, Manchester; Mr. J. R. Hammond, Deal; Mr. A. O. Hasiewood, Buxton; Messrs. Haasenstein and Vogler, Geneva; Messrs. Hirschfield Bros., Lond.; Hastings Hosp., Sec. of; Home Hosp., Bournemouth; Harveian Soc., Lond., Hon. Sec. of; Hull Borough Asylum, Steward of; Hosp. for Women, Soho-sq., Sec. of.

J.—Dr. J. R. James, Pentre; Mr. J. J. Jackson, Garston; Mr. J. C. James, Glasgow; Mr. F. H. Jacob, Westbury; Mr. M. H. Judge, Lond.; Jeyes' Sanitary Compounds Co., Lond.

K.—Mr. R. Kimpton, London; Messrs. Krohne and Sesemann.

L.—Dr. J. F. Little, Lond.; Dr. S. W. Latta, Trenton, N. Jersey; Mr. E. A. Lightburn, Lond.; Mr. C. S. Langley, Thurlow; Lower Phillimore-place, No. 31.

M.—Dr. H. W. G. Macleod, Lond.; Dr. R. L. Meade-King, Taunton; Mr. W. S. Mayne, Ivybridge; Mr. J. M. Mangan, Ennis; Mr. H. C. McBryan, Box; Mr. E. A. Millar, Lond.; Messrs. G. Mason and Co., Lond.; Messrs. Maple and Co., Lond.; Messrs. Manlove, Alliot, and Co., Nottingham; Messrs. J. Maythorn and Son, Biggleswade; Moss Litter and Peat Industries, Lond.; Missouri Pacific Railway Co., Manager of; Manchester Royal Infirmary, Sec. of; Medical Society of Victoria, Melbourne, Sec. of.

N.—Mr. Newman, Barmouth; Nottingham Children's Hospital, Sec. of; National Provident Institution, Lond., Sec. of.

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